§11.4 Liability Insurance. The Board of Directors shall obtain and maintain, as a Common Expense, comprehensive general public liability insurance (including medical payments insurance) and property damage insurance in such limits as the Board may from time to time determine, insuring each Board of Directors member, the managing agent, each Unit Owner and the Declarant against any liability to the public or to the Unit Owners (and their invitees, agents and employees) covering all occurrences commonly insured against for death, bodily injury or property damage, arising out of the maintenance, ownership or use of the Common Elements, and for any legal liability resulting from suits or actions related to employment contracts to which the Association is a party. Such insurance shall be issued on a comprehensive liability basis and shall contain: (a) a cross liability endorsement, under which the rights of a named insured under the policy shall not be prejudiced with respect to his action against another named insured; (b) hired and non-owned vehicle coverage; (c) a "severability of interest" endorsement, which shall preclude the insurer from denying liability to a Unit Owner because of negligent acts of the Association or of another Unit Owner; and (d) a broad form liability extension endorsement including "personal injury," contractual liability, and other coverage commonly included in such broad form endorsement. The Board of Directors shall review such limits once each year, but in no event shall such insurance be less than one million dollars ($1,000,000.00) covering all claims for bodily injury or property damage arising out of one occurrence.

§11.5 Additional Required Provisions. All insurance policies required to be carried by the Association under this Article shall in addition contain the following provisions or features:

i. The insurer waives any right to claim by way of subrogation against the Declarant, the Association, the Board of Directors, the managing agent or the Unit Owners, and their respective agents, employees, guests and, in the case of the Unit Owners, the members of their households;

ii. The Declarant, so long as the Declarant shall own any Unit, shall be protected by all such policies as a Unit Owner.

iii. Each Unit Owner is an insured person under the policy with respect to liability arising out of the ownership of an undivided interest in the Common Elements or membership in the Association;

iv. The insurer waives its right to subrogation under the policy against any Unit Owner or members of his household;

v. No act or omission by any Unit Owner, unless acting within the scope of his authority on behalf of the Association, will void the policy or be a condition to recovery under the policy; and

vi. If at the time of a loss under the Association's policy, there is other insurance in the name of a Unit Owner covering the same risk covered by the policy, the Association's policy provides primary insurance.

§11.6 Other Insurance. The Board of Directors shall obtain and maintain as a Common Expense:

(i) To the extent reasonably available, "directors and officers'" liability insurance, to satisfy the indemnification obligations of the Association;

(ii) Workers' compensation insurance, if and to the extent necessary to meet the requirements of law;

(iii) Flood insurance if any or all of the Property is located in a special flood hazard area equal to the greater of 100% of the insurable value of the Property or the maximum coverage available under the appropriate national Flood Insurance Administration program. A blanket or master policy shall be obtained which includes a maximum deductible of the lesser of $5,000 or one percent (1.00%) of the policy face amount; and

(iv) Such other insurance as the Board of Directors may determine, as may be requested by a majority of the Unit Owners, or as may be required by Federal National Mortgage Association Guidelines (including, without limitation, fidelity bond coverage).

§11.7 Memoranda and Cancellation. All insurers that shall issue an insurance policy or policies under this Article shall issue certificates or memoranda of insurance to the Association, and, upon request, to any Unit Owner or Mortgagee.

All such insurers issuing the policy may not cancel (including cancellation for non-payment of premium), substantially modify, or refuse to renew such policy or policies until twenty (20) days after notice of the proposed cancellation of non-renewal has been mailed to the Association, the managing agent, each Unit Owner and each Mortgagee to whom a certificate or memorandum of insurance has been issued at their respective last known addresses.

§11.8 Separate Insurance. Each Unit Owner should obtain at his own expense, a personal condominium insurance policy (form type HO-6 as established by Insurance Services Office, Inc.) for damage to his Unit and personal property for his own benefit and for his personal liability as well as upon any improvements made by him to his Unit under coverage normally called "improvements and betterments coverage;" provided, however, that no Unit Owner shall be entitled to exercise his right to acquire or maintain such insurance coverage which would decrease the amount which the Association on behalf of all Unit Owners may realize under any insurance policy maintained by the Association, or to cause any insurance coverage maintained by the Association to be brought into contribution with insurance coverage obtained by a Unit Owner. All such Unit Owner's policies shall contain waivers of subrogation in favor of the Association. The Association shall have no responsibility for ascertaining whether or not the Unit Owner maintains such insurance in effect.

Notwithstanding any other provision of this Declaration, during the period a building or other associated improvements are under construction prior to the creation of Units therein, the Declarant shall be responsible for procuring casualty insurance on the building and the proceeds of such insurance shall be the exclusive property of the Declarant and its mortgagee.

ARTICLE 12
DAMAGE OR DESTRUCTION.

§12.1 Repair. Any portion of the Property damaged or destroyed shall be repaired or replaced promptly by the Association unless:

i. The Condominium is terminated;

ii. Repair or replacement would be illegal under any state or local health or safety statute or ordinance; or

iii. One Hundred percent (100%) in interest of the Unit Owners vote not to rebuild, including every owner of a Unit or limited common area which would not be rebuilt, and including the consent of the Eligible Mortgage Holders as required herein.

The cost of repair or replacement in excess of insurance proceeds and reserves or not covered by any deductible shall be a common expense, provided that Unit Owners shall be responsible for $1,000 of the insurance deductible for damage to their Units or such greater portion of the deductible established by the Rules and Regulations adopted from time to time by the Board of Directors.

§12.2 Application of Insurance Proceeds. If the entire Property is not completely repaired or replaced:

i. the insurance proceeds attributable to the damaged Units and Common Elements shall be used to restore the damaged areas to a condition compatible with the remainder of the Condominium;

ii. the insurance proceeds attributable to Units which are not rebuilt, including without limitation the interest in the Common Elements and in Limited Common Element, shall be distributed to such Unit Owners and their mortgagees; and

iii. the remainder of the proceeds shall be held in trust to be distributed to the Unit Owners and their mortgagees in accordance with the Condominium Act.

Any loss covered by such insurance shall be adjusted with the Association, which shall exclusively represent all Unit Owners in any proceedings, negotiations, settlements or agreements. The insurance proceeds shall be paid to the Association as trustee for the Unit Owners and lien holders as their interests may appear. Mortgagees' liens shall transfer in order of priority to the insurance proceeds. Notwithstanding the provisions of this Section, Article 13 of the Declaration governs the distribution of insurance proceeds if the Condominium is terminated. If the members vote not to rebuild any Unit, that Unit's percentage interest in the Common Elements shall be automatically reallocated to the then remaining Units in proportion to their percentage interests prior to the reallocation, and the Association shall promptly prepare, execute and record an amendment to the Declaration reflecting the reallocation. Unless a Unit Owner has requested and received written confirmation from both the Association and the Association's hazard insurance carrier of optional insurance coverage for the owner's permanent improvements and betterments within the Unit, the Unit Owner shall be responsible for the expense of repair or replacement.

Notwithstanding any other provision of this Declaration, during the period a building is under construction prior to its creation as a Unit and the time the Unit commences paying common charges, the Declarant shall be responsible for procuring casualty insurance on the

building and the proceeds of such insurance shall be the exclusive property of the Declarant and its mortgagee.

ARTICLE 13
TERMINATION OF CONDOMINIUM

§13.1 Termination. In accordance with Condominium Act, the Condominium may be terminated in whole or part with the agreement of the Owners of Units to which at least eighty (80) percent of the Votes in the Association are allocated, and that percentage of Eligible Mortgage Holders required herein and the Condominium Act. Termination shall not bar the subsequent resubmission of the Property to the Condominium Act.

§13.2 Effect of Termination. Upon removal of the Property from the Condominium Act, the Unit Owners shall hold the Property and any proceeds thereof as tenants in common in accordance with the Condominium Act and subject to the Condominium Act with any mortgages or liens affecting a Unit to attach in order of priority against the resulting interest.

ARTICLE 14.
EMINENT DOMAIN.

§14.1 Acquisition of Unit(s). If a Unit is acquired by eminent domain, to the extent the award is paid to the Association or is controlled by this Declaration or the Association, the award shall be applied to compensate the Unit Owner and his mortgagee(s), if any, for the Unit and its percentage interest in the Common Elements, whether or not any Common Elements are acquired. Upon acquisition of the Unit, its Allocated Interests shall be automatically reallocated to the remaining Units in proportion to their respective Allocated Interests before the taking, and the Association shall promptly prepare, execute, and record an instrument reflecting the reallocations.

If part of a Unit is acquired by eminent domain, to the extent the award is paid to the Association or is controlled by this Declaration or the Association, the award shall be applied to compensate the Unit Owner and his mortgagee(s), if any, for the reduction in value of the Unit and its interest in the Common Elements, whether or not any Common Elements are acquired. Upon such acquisition, (i) that Unit's Allocated Interests shall be reduced in proportion to the reduction in the size of the Unit, and (ii) the portion of the allocated interest divested from the partially acquired Unit shall automatically be reallocated to that Unit and the remaining Units in proportion to their respective Allocated Interests, with the partially acquired Unit participating in the reallocation on the basis of its reduced Allocated Interests provided however, that each Unit shall continue to have one vote to permit equality among Units.

§14.2 Acquisition of Common Elements. If part of the Common Elements are acquired by eminent domain, the Association shall be entitled to payment of the award, subject, however, to the Condominium Act; generally the portion of the award attributable to the Common Elements taken shall be distributed to the Unit Owners and their mortgagee(s) in accordance with the Condominium Act, unless the Association rebuilds or acquires comparable elements. Any portion of an award attributable to the acquisition of a Limited

Common Elements or as may otherwise benefit the Condominium as determined by a Court of competent jurisdiction must be equally divided among the owners of the Units to which that Limited Common Element was allocated at the time of acquisition in proportion to their interests in the Common Elements.

§14.3 Rights of the Association and Mortgage Holders. In the event of a proposed acquisition by eminent domain, the Association shall have the right but not the obligation to act and to intervene on behalf of Unit Owners. Nothing contained in this Declaration, the Bylaws or any rule or regulation adopted by the Association, however, shall entitle any Unit Owner or other person to priority over a first mortgagee of a Unit pursuant to its mortgage instrument in the right to receive eminent domain awards for the taking of Units and/or Common Elements.

ARTICLE 15
AMENDMENTS

§15.1 General. Certain amendments to this Declaration may be made unilaterally by the Declarant in accordance with this Declaration and the Condominium Act. In addition, certain amendments may be unilaterally executed and recorded by the Association as described in Condominium Act Sections 1601-107, Eminent Domain, 1602-108(c), Allocation of Limited Common Elements, 1602-112(a), Relocation of Boundaries Between Adjoining Units, 1602-113, Subdivision of Units and 1602-117(a), Amendment of Declaration, and certain amendments to this Declaration may be made by certain U in Sections 1602-108(b), Reallocation of Limited Common Elements, 1602-112(a), Relocation of Boundaries Between Adjoining Units, 1602-113(b), Subdivision of Units, or 1602-118(b) of the Condominium Act.

Otherwise subject to the other provisions of this Declaration and of the Condominium Act, the Declaration and the accompanying Plats and the Plans may be amended as follows:

(a) *Before Any Conveyance.* Prior to the conveyance of any Unit by the Declarant to a third party purchaser (other than as security for an obligation), the Declarant shall have the right to unilaterally amend and re-amend this Declaration in any manner that the Declarant may deem appropriate.

(b) *After First Conveyance.* After the first conveyance of Unit by a Declarant to a third party purchaser, the terms of the following procedures shall apply to an amendment of this Declaration:

(i) *Development and Special Declarant Rights.* Notwithstanding any other provision of this Declaration, the Declarant acting unilaterally may record amendments to this Declaration which result from the exercise of Development and Special Declarant Rights pursuant to this Declaration and/or the Act.

(ii) *Proposal and Notice.* An amendment to the Declaration may be proposed by either the Board of Directors or by Unit Owners holding at least twenty (20) percent of the votes in the Association. Notice of the subject matter of a proposed amendment, including the proposed text thereof, shall be included in the notice of

any meeting in which a proposed amendment is to be considered, and such notice shall be given to all Unit Owners and all eligible Mortgage Holders.

(ii) *Approval.* The amendment shall be adopted if it receives the affirmative vote or written consent of Sixty-Seven percent (67%) or more of the total percentage in interest of all votes in the Association in all cases and such Eligible Mortgage Holders as may be required herein. Unit Owners and mortgagees may express their approval in writing or by proxy. Provided however that no amendment may change the uses to which a Unit may be put without the unanimous consent of the owners of Units affected. Except as specifically provided to the contrary in this Declaration or the Act, no amendment may alter the boundaries of a Unit or the Allocated Interests allocated to a Unit without the unanimous consent of all affected owners.

(iii) *By Written Agreement.* In the alternative, an amendment may be made by an agreement signed by the record Owners of Units to which are allocated one hundred percent (100%) of the Units in the manner required for the execution of a deed and acknowledged by at least one of them, together with any required approval by Eligible Mortgage Holders, and such amendment shall be effective when certified and recorded as provided below.

§15.2 Proviso; Consent of Declarant. No amendment of this Declaration shall make any change which would in any way affect any of the rights, privileges, powers and options of the Declarant, its successors or assigns, unless the Declarant shall approve such amendment.

§15.3 Notice, Execution and Recording. After each amendment to this Declaration adopted by the Association pursuant to this Article has been recorded, notice thereof shall be sent to all Unit Owners and to all Eligible Mortgage Holders, but failure to send such notices shall not affect the validity of such amendment. A certificate of each such amendment shall be executed and acknowledged by such officer(s) or director(s) of the Association designated for that purpose by the Bylaws. The amendment shall be effective when such certificate and copy of the Amendment are recorded.

§15.4 Notice and Challenge. No action to challenge the validity of an amendment to this Declaration adopted by the Association may be brought more than one (1) year after such amendment is recorded.

ARTICLE 16
GENERAL PROVISIONS

§16.1 Enforcement. The failure to comply with the terms of this Declaration, the Bylaws and the Rules and Regulations adopted pursuant thereto shall entitle the Association to (a) take court action, including without limitation suit for injunctive relief, and/or (b) take such further action as permitted under the Bylaws, and/or (c) enter the Unit or Common Elements in which such violation or breach exists and summarily to abate and cure the violation at the expense of the defaulting Unit Owner, and the Board of Directors shall not be deemed guilty in any manner of trespass when enforcing these terms. The exercise of any one remedy shall not

preclude the exercise of other remedies provided by law, the Condominium Act, this Declaration or in the Bylaws. In any such enforcement action or proceeding the Association shall be entitled to recover the costs of the proceeding, including reasonable attorney's fees and costs, with interest.

The failure of the Board of Directors to enforce any covenant, restriction or other provision of the Condominium Act, the Bylaws or the Rules and Regulations adopted pursuant thereto, shall not constitute a waiver of the right to do so thereafter.

§16.2 Units Not Yet Separately Assessed. In the event that for any year real estate taxes are not separately taxed and assessed to each separate Unit Owner but are taxed on the Property as a whole, then each Unit Owner shall pay his proportionate share thereof in accordance with his respective Common Expense Liabilities.

§16.3 Conflict. If any provision of this Declaration, the Bylaws or the Rules and Regulations conflicts with any applicable laws, including, but not limited to, the Condominium Act, then the laws shall be deemed controlling; but the validity of the remainder of this Declaration, the Bylaws and Rules and Regulations, and the application of any such provision, section, clause, phrase, or word in other circumstances shall not be affected thereby.

§16.4 Severability. The invalidity of any provision of this Declaration shall not be deemed to impair or affect in any manner the validity, enforceability or effect of the remainder of this Declaration, and in such event, all of the other provisions of this Declaration shall continue in full force and effect as if such invalid provision had never been included herein.

§16.5 Waiver. No provision contained in this Declaration shall be deemed to have been abrogated or waived by reason of any failure to enforce the same irrespective of the number of violations or breaches which may occur.

§16.6 Captions. The headings in this Declaration are for purposes of reference only, and shall not limit or otherwise affect the meaning hereof. The table of contents is attached to this Declaration for purposes of reference and convenience only, and shall neither limit nor otherwise affect the meaning of this Declaration. References in this Declaration to Articles, and Schedules without references to the document in which they are contained are references to this Declaration. Schedules are attached to and incorporated by reference into this Declaration.

§16.7 Gender, Number, Etc. The use of the singular number in this Declaration shall be deemed to include the plural, the plural the singular, and the use of any one gender shall be deemed applicable to all genders.

§16.8 Power to Interpret. Any dispute or disagreement with any person other than the Declarant with respect to interpretation or application of this Declaration or the Bylaws or the Rules and Regulations shall be determined by the Board of Directors, which determination shall be final and binding on all parties.

§16.9 Disputes with Declarant and Arbitration. In any dispute between one or more Unit Owners and the Declarant regarding the Common Elements, the Board of Directors shall

act for the Unit Owners, and any agreement with respect thereto by the Board of Directors shall be conclusive and binding upon the Unit Owners.

All claims, disputes and other matters in question between the Declarant, on the one hand, and the Association or any Unit Owner(s), on the other hand, arising out of or relating to a Unit, the Common Elements, the Limited Common Elements, this Declaration, the Bylaws, the Rules and Regulations, or the deed to any Unit or the breach thereof, or the course of dealing between any Unit Owner, the Association and the Declarant, except for claims which have been waived by the acceptance of a deed, shall be decided by arbitration in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association then obtaining unless the parties mutually agree otherwise in writing. This agreement to arbitrate shall be specifically enforceable under the prevailing arbitration law. The award rendered by the arbitrators shall be final, and judgment may be entered upon it in accordance applicable law in any court having jurisdiction thereof.

ARTICLE 17
NOTICES

§17.1 Notices.

(a) *To Unit Owners.* All notices, demands, bills and statements or other communications affecting the Condominium shall be given to Unit Owners by the Association in writing and shall be delivered in hand, delivered to the Unit, or sent by United States mail, postage prepaid. If such notification is of a default or lien, then it shall be sent by registered or certified United States mail, return receipt requested, postage prepaid, addressed to the Unit Owner at the address which the Unit Owner shall designate in writing and file with the Secretary of the Association, or if no such address is so designated, the address of the Unit of such Unit Owner who is the record owner thereof.

(b) *Notice to the Association.* All notices, demands, statements or other communications affecting the condominium given by the Unit Owners to the Association shall be in writing, and shall be deemed to be delivered personally, securing a written receipt therefore, or sent by United States mail, postage prepaid, return receipt requested, addressed to the Association at the principal office of the managing agent, if any, and to the secretary of the Association at the Secretary's address.

(c) *Notice to Eligible Mortgage Holder.* All notices, demands, statements or other communications affecting the Condominium given by the Association to any Eligible Mortgage Holder shall be in writing and shall be delivered personally, securing a written receipt, or sent by United States mail, postage prepaid, addressed to the Eligible Mortgage Holder at the address identified pursuant to the notice given to the Association when it became an Eligible Mortgage Holder.

WITNESS its hand and seal as of _____ ____, 2007.

HRC-VILLAGE AT LITTLE FALLS, LLC

_____ By: _____
Witness _____, its Manager

STATE OF MAINE
Cumberland, ss _____, 2007

Personally appeared the above-named _____ in her said capacity and acknowledged the foregoing Declaration to be his free act and deed, and the free act and deed of said limited liability company, before me,

_____
Name: _____
Attorney at Law/Notary Public

Exhibit A	Legal Description of Land
Exhibit B	Condominium Plat
Exhibit C	Condominium Floor Plans
Exhibit D	Allocated Interests
Exhibit E	Condominium Association Bylaws

DECLAR SMITH PARK.DOC
3/23/2007

Exhibit A
Legal Description of the Land

A certain lot or parcel of land located on the easterly side of Depot Street in the Town of Windham, County of Cumberland and State of Maine, being more particularly bounded and described as follows:

Exhibit B Condominium Plat

Exhibit C Condominium Floor Plans

Exhibit D Allocated Interests

Unit #	# Votes	% Interest in Common Elements	% Common Expense Liability
——	1	100%	100%
Total	1	100%	100%

Note: The percentage of each Unit's Common Element Interest and Common Expense Liability is allocated by a formula set forth in Section 3.4 of the Declaration

Each Unit shall each have one vote in the Association on a formula of one vote per Unit to permit equality among Units.

DECLAR SMITH FARM.DOC
3/23/2007

Exhibit E Condominium Association Bylaws

VILLAGE AT LITTLE FALLS.DOC
5/23/2007

Appendix M

Presumpscot River Stream Gage Information

Water Resources

National Water Information System: Web Interface

Data Category: Site Information | Geographic Area: United States | GO

USGS 01064118 Presumpscot River at Westbrook, Maine

Available data for this site | Site home page | GO

Stream/River Site

LOCATION

Latitude 43°41'13.19", Longitude 70°20'49.69" NAD83
Cumberland County, Maine , Hydrologic Unit 01060001

DESCRIPTION

Drainage area: 577.00 square miles
Contributing drainage area: 577.00 square miles,
Datum of gage: 13.42 feet above sea level NGVD29.

AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Real-time	**This is a real-time site**		
Peak streamflow	1976-04-02	1996-10-22	21
Daily Data			
Discharge, cubic feet per second	1975-10-01	1995-09-30	7305
Gage height, feet	1998-11-13	2007-05-22	3000
Daily Statistics			
Discharge, cubic feet per second	1975-10-01	1995-09-30	7305
Gage height, feet	1998-11-14	2006-09-30	2768
Monthly Statistics			
Discharge, cubic feet per second	1975-10	1995-09	
Gage height, feet	1998-11	2006-09	
Annual Statistics			
Discharge, cubic feet per second	1976	1995	
Gage height, feet	1999	2006	
Field/Lab water-quality samples	1991-10-28	1992-05-14	3

OPERATION:

Record for this site is maintained by the USGS Maine Water Science Center
Email questions about this site to Maine NWISWeb Data Inquiries

VIL_RESP03195

Appendix N

Sediment Loading Calculations

NORTHEAST CIVIL SOLUTIONS, INC.
Surveying Engineering Land Planning
153 U.S. Route 1, Scarborough, Maine 04074
Tel: 207-883-1000 • Fax: 207-883-1001

PROJECT [illegible]
SHEET NO. [illegible] OF [illegible]
CALCULATED BY [illegible] DATE [illegible]
CHECKED BY DATE
SCALE

Sediment [illegible] – FOR [illegible]

CB-23: [illegible]
328' × 11' [illegible] = [illegible] .08 [illegible] Ac

[illegible] = (Area [illegible] (Ac) × 500 #'s / [illegible]) × ([illegible]) × [illegible]

= (.0[illegible] Ac × 500 #/Ac [illegible] / [illegible]) [illegible]

= 4.72 cf / [illegible]

Assume 4' ⌀ CB = A = πr²
A = (3.14)(2)² = 12.56 sf

V = A × height
V = 12.56 sf × 1 ft = 12.56 cf / 1 ft [illegible]

Annual Height of Sediment = 4.72 / 12.56 = .38' / year

VIL_RESP03197

NORTHEAST CIVIL SOLUTIONS, INC.
Surveying Engineering Land Planning
153 U.S. Route 1, Scarborough, Maine 04074
Tel: 207-883-1000 • Fax: 207-883-1001

PROJECT ______
SHEET NO. ______ OF ______
CALCULATED BY ______ DATE ______
CHECKED BY ______ DATE ______
SCALE ______

Sediment [illegible] Calcs [illegible] Underground [illegible]

Area [illegible] Quote = (Area of Proposed [illegible] Area [illegible] + [illegible] to site)

= 2.1 ac

Assume Offsite Area Sanded Area = 1 ac

CF of Sediment [illegible] = (Area [illegible] × 500# / Ac Storm) / 90 #/CF × 10 Storm / Yr

= [(2.1ac + 1ac) × 500# / ac Storm] / 90 #/CF × 10

= 172 CF of Sediment Per Yr

An Isolator Row will Collect Sediment

Isolator Row Area = 51" / 12"/ft × 85.4" / 12"/ft × 23 chambers

= 696 ft²

Depth of Sediment Per Year = 172 CF / 696 SF = 0.24 ft

= 2.9" of sediment / yr < 3"

- OK -

The Proposed Water Quality Volume (Without Sediment) = 17,227 CF

If 172 CF of this Area was filled with Sediment, then Volume would be 17,055 CF

VIL_RESP03198

Since 17,055 CF is still > 16,980 CF of W.Q.V. Required + OK

Appendix O

Riverbank Rip-rap Sizing Calculations

Northeast Civil Solutions, Inc.
153 US Route 1
Scarborough, Maine 04074

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE [1]	WIDTH [2] (FT.)	SECTION AREA (SQ. FT.)	MEAN VELOCITY (F.P.S.)	REGULATORY (NGVD)	WITHOUT FLOODWAY (NGVD)	WITH FLOODWAY (NGVD)	INCREASE (FEET)
Presumpscot River (continued)								
S	16.83	140	1,610	6.2	97.1	97.1	97.2	0.1
T	16.95	170	1,900	5.3	115.1	115.1	115.1	0.0
U	16.98	240	2,910	3.4	115.6	115.6	115.6	0.0
V	17.07	300	2,140	4.7	115.8	115.8	115.8	0.0
W	17.12	300	2,840	3.5	116.1	116.1	116.1	0.0
X	17.35	220	3,560	2.8	116.4	116.4	116.5	0.1
Y	17.59	150	2,270	4.4	116.6	116.6	116.7	0.1
Z	17.81	190	2,940	3.4	117.0	117.0	117.2	0.2
AA	18.16	200	2,900	3.4	117.4	117.4	117.6	0.2
AB	18.36	300	2,850	3.5	117.7	117.7	117.9	0.2
AC	18.42	380	3,340	3.0	117.9	117.9	118.1	0.2
AD	18.46	290	3,410	2.9	118.0	118.0	118.2	0.2
AE	18.65	340	7,140	1.4	139.4	139.4	139.4	0.0
AF	18.67	760	11,600	0.8	139.4	139.4	139.6	0.2
AG	18.92	300	5,050	1.9	139.6	139.6	139.6	0.0
AH	19.13	120	2,340	4.1	139.6	139.6	139.6	0.0
AI	19.14	120	1,930	5.1	139.6	139.6	139.7	0.1

[1]Miles above mouth

[2]This width extends beyond corporate limits

TABLE 3

FEDERAL EMERGENCY MANAGEMENT AGENCY
Federal Insurance Administration

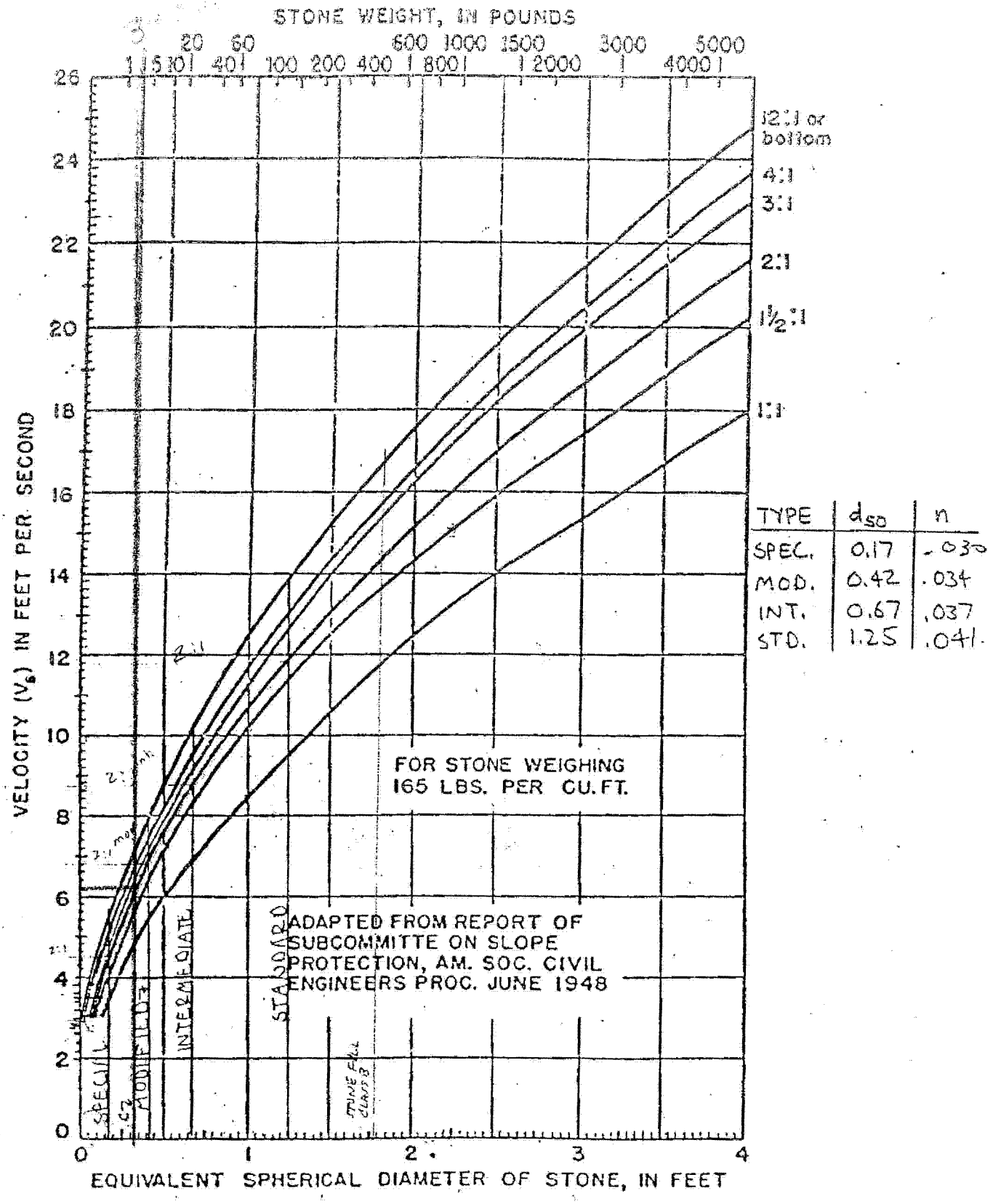
TOWN OF WINDHAM, ME
(CUMBERLAND CO.)

FLOODWAY DATA

PRESUMPSCOT RIVER

VIL_RESP03200

FROM HEC-11: USE OF RIP RAP FOR BANK PROTECTION



TYPE	d_{50}	n
SPEC.	0.17	.030
MOD.	0.42	.034
INT.	0.67	.037
STD.	1.25	.041

FIG. 2-SIZE OF STONE THAT WILL RESIST DISPLACEMENT FOR VARIOUS VELOCITIES AND SIDE SLOPES

VIL_RESP03201

Appendix P

Weir Height Calculation for Isolator Row

Northeast Civil Solutions, Inc.
153 US Route 1
Scarborough, Maine 04074

NORTHEAST CIVIL SOLUTIONS, INC.

Surveying Engineering Land Planning
53 U.S. Route 1, Scarborough, Maine 04074
Tel: 207-883-1000 • Fax: 207-883-1001

PROJECT ______
SHEET NO. ______ OF ______
CALCULATED BY ______ DATE ______
CHECKED BY ______ DATE ______
SCALE ______

[illegible] WEIR [illegible] (DES-2)

HEIGHT OF WATER ABOVE WEIR = 1.6' (SEE HYDROCAD CALCS)

TOP OF CHAMBER = 105.3

POSITION WEIR SO THAT THE HEIGHT OF WATER = TOP OF CHAMBER

WATER ELEV = WEIR ELEV + WATER DEPTH ABOVE WEIR

$105.3 = x + 1.6'$

$x = 103.7$

VIL_RESP03203

Denise Cameron

From: Hubert, Marianne E [Marianne.E.Hubert@maine.gov]
ent: Wednesday, July 11, 2007 2:02 PM
o: Denise Cameron
Cc: Richardson, Marybeth
Subject: RE: Village at Little Falls, Windham ME

Hello Denise,
Your thoughts and the proposed design are appropriate because the upgradient water will never get into the subsurface system as it will be mostly by-passed at the control outlet (i.e. the subsurface detention system is off-line and the upgradient runoff will reach that point mostly after the runoff from the proposed development). Thus, I am satisfied with your argument.
As we talked on the phone, I still have concerns about the design of the subsurface system. You indicated that you had already addressed these issues with a redesign. I will wait until I receive the revised plans to finalize my comments for this project.
All the best,
Marianne Hubert
Senior Environmental Engineer
Division of Watershed Management
Bureau of Land and Water Quality Control
17 State House Station
Augusta, ME 04333
ph. (207) 287-4140

-----Original Message-----
om: Denise Cameron [mailto:denise.cameron@northeastcivilsolutions.com]

Sent: Monday, July 09, 2007 4:39 PM
To: Hubert, Marianne E
Cc: Richardson, Marybeth
Subject: FW: Village at Little Falls, Windham ME

Marianne,

Thank you for the follow-up phone call regarding the sizing of the filter for the Village at Little Falls project. The following table summarizes the impervious areas for the project, as requested:

Impervious Areas:
Existing Onsite Impervious Area = 2.0 ac Total Post Development Impervious Area Onsite = 4.4 ac (This is the area used in the filter sizing) Increase in Impervious Area Onsite = 2.4 ac Assumed Offsite Impervious Area = 1.6 ac

As we discussed, this project qualifies as a "redevelopment site" Therefore, the treatment was sized to the maximum extent practical. The filter was sized based upon an impervious area of 4.4 acre, which is greater than the total of new impervious area created plus the offsite impervious area (1.6 +
2.4 = 4 acre) Based upon our phone conversation, this configuration appears to be acceptable.

ank you,
enise Cameron, PE
Northeast Civil Solutions, Inc
153 US Route One

VIL_RESP03205

Scarborough, Maine 04074
Ph 207-883-1000

-----Original Message-----
From: Denise Cameron [mailto:denise.cameron@northeastcivilsolutions.com]
Sent: Monday, July 09, 2007 3:47 PM
To: marianne.e.hubert@maine.gov
Subject: Village at Little Falls, Windham ME

Marianne,

As we mentioned in the Stormwater Management Report for the Village at Little Falls project, an existing 18" culvert provides drainage for a 6.3 acre area east of the property. We picked up the flow from this culvert and directed it into the proposed catchbasin system. However, the filter sizing calculations were based upon site's developed area and thus did not include the offsite drainage area. A by-pass is incorporated into the underground detention system to manage the additional flow, when needed. This is required because the tight site configuration does not allow for enough room to bypass the proposed catchbasin system all together. Please confirm that this configuration is acceptable. As always, please feel free to call if you have any questions or comments.

Thank you for your input,
Denise Cameron, PE
Northeast Civil Solutions, Inc
153 US Route One
Scarborough, Maine 04074
Ph 207-883-1000

VIL_RESP03206

NCS

Northeast Civil Solutions
INCORPORATED

July 9, 2007

Mr. Jeffrey Hanscom
Central Maine Power Company
162 Canco Road
Portland, ME 04103

RE: Village at Little Falls, Windham

Dear Jeff,

Enclosed please find a revised utility plan for the proposed Village at Little Falls in Windham. It would be greatly appreciated if you could review the most current proposal and provide any comments for us to address.

If you have any questions, concerns please feel free to contact me. I appreciate your time. Thank you.

Sincerely,
Northeast Civil Solutions, Inc.

Matthew O'Brien

Matthew O'Brien, E.I.
Project Engineer

Encl: Utility Plan

G:\29000\29500\29522 HRC Village at Little Falls\ Correspondence\Hanscom-CMP-7-09-07

VIL_RESP03208

NCS

Northeast Civil Solutions
INCORPORATED

July 9, 2007

Deputy Chief John Wescott
Fire Rescue Department
Town of Windham
375 Gray Road
Windham, Maine 04062

RE: Village at Little Falls, Windham

Dear Deputy Chief John Wescott,

Enclosed please find a revised utility plan for the proposed Village at Little Falls in Windham. It is to my understanding that you have met with Lee Allen to discuss fire safety layout, however, it would be greatly appreciated if you could review the most current proposal. The Town of Windham has requested a letter of approval from the fire department. Please forward this letter to us at your earliest convenience.

If you have any questions, or concerns please feel free to contact me. I appreciate your time. Thank you.

Sincerely,
Northeast Civil Solutions, Inc.

Matthew O'Brien, E.I.
Project Engineer

Encl: Utility Plan

G:\29000\29500\29522 HRC Village at Little Falls\ Correspondence\Wescott-Fire-7-09-07

VIL_RESP03210

William J. Bray, P.E.
235 Bancroft Street
Portland, Maine 04102
Phone (207) 774-3603
wbray@yorkmaine.org

JUL 1 2007

July 8, 2007

Lee Allen, P.E.
Northeast Civil Solutions, Inc.
153 US Route 1
Scarborough, ME 04074

RE: Village at Little Falls Response to Peer Review Comments

Dear Lee:

Gorrill-Palmer, Inc. July 5, 2007 peer review letter to Brooks More, AICP, Town of Windham's Director of Planning, identified 5 traffic related comments. Each comment, followed by an appropriate response, is provided as follows for your review and ultimate submittal to the Town:

1. We concur with the trip generation, traffic volume adjustments and crash analysis. We would question the full occupancy date of 2009, but given the 1% annual adjustment to the background volumes, we would not expect that a study horizon several years later would affect the conclusions of the study.
   Comment acknowledged

2. The capacity analysis showed only one movement below Level of Service "D" out of the several intersections that were studied. This was the Chute Road westbound thru-left turn movement at River Road. The volumes indicate only 3 right turns out of Chute Road, which would not justify a separate turn lane. The volumes exiting Chute Road would not likely satisfy a signal warrant; therefore, the lower level of service is acceptable.
   Comment acknowledged

3. The study did not address the potential need for a left-turn lane on River Road at Depot Street. Since the proposed project sends the majority of the site-generated traffic through this intersection, we suggest that a left turn warrant evaluation be provided.
   In response to this comment, MDOT's Figure 8-19; Volume Warrants for Left-Turn Lanes at Unsignalized Intersections on 2-Lane Highways (40mph) was evaluated based upon estimated 2009 AM and PM Post-Development traffic conditions. Figures 7 and 8 from the submitted traffic impact study (refer to attached copies) were used as the basis for assessing the need for a separate left-turn lane from westbound River Road. The respective values used for each peak hour condition are noted as follows:

AM Peak Hour	*PM Peak Hour*
Va = 159 vehicles	*Va = 705*
Vo = 837 vehicles	*Vo = 250*
Left turn % = 9 %(14 left-turn vehicles)	*Left-turn % = 5 %(35 left-turn vehicles)*

Attached for reference, is a copy of MDOT's Figure 8-19 that depicts the location of noted values for both peak hour conditions. Based upon the defined process a separate left-turn lane is not warranted during the AM peak hour condition and is very minimally warranted for the PM peak hour time period. The 35 vehicles in the PM peak hour attempting to turn left from River Road to Depot Road are opposed by a total of 250 vehicles. The capacity analysis completed for the PM peak hour condition suggests that the highest or "best" level of service is maintained for the left-turn movement from River Road. Further, MDOT's 2002 through 2004 safety data for the intersection would suggest that the intersection is currently not experiencing a safety problem. It would be the opinion of the writer that a separate left-turn lane is not appropriate based upon projected post-development conditions.

4. The MaineDOT crash summary report should be provided for our review.
   A copy of the report is attached as requested.

5. The traffic study discusses only two driveways in the sight distance analysis. The plans show three driveways and an emergency vehicle access. The Depot Street Plan and Profile (Sheet 38 of 38) indicates that Depot Street will be reconstructed in the vicinity of Trillium Lane to achieve a minimum 250 feet of sight distance. Based on our field review and this plan, sight distances appear to be adequate. However, the applicant should clarify the driveway situation and provide their own Assessment of the sight distances.
   The third full service driveway, an existing joint driveway with the Little Falls Landing project, was previously evaluated at the time of site plan approval and it was determined that sufficient vehicle sight distance could only be provided with major reconstruction of Depot Road. (A copy of the earlier evaluation letter, which is dated August 23, 2005, is attached for reference.) As a result of the earlier recommendation, Depot Road will be reconstructed concurrent with development of the proposed Little Falls housing project to provide a minimum of 250-feet of sight distance, which meets MDOT's standard for a posted speed limit of 30mph.

If you have further questions or desire additional clarifications, please contact me at 363-1011.

Very truly yours,

STATE OF MAINE
JAMES BRAY
No. 9017
REGISTERED PROFESSIONAL ENGINEER

VIL_RESP03213

William J. Bray, P.E.
235 Bancroft Street
Portland, Maine 04102
Phone (207) 774-3603
wbray@yorkmaine.org

August 23, 2005

Mr. Lee Allen, P.E.
Northeast Civil Solutions, Inc.
153 US Route 1
Scarborough, Maine 04074

RE: Village at Little Falls – Phase I

Dear Lee:

It is my understanding that Village at Little Falls, LLC is proposing to re-develop the Keddy Mills property on Depot Road in the Town of Windham in two phases of development. Phase I will consist of 24-senior restricted apartment units and Phase II will add an additional 85 apartment/townhouse/condominium units.

This letter provides an estimate of the number of new vehicle trips generated by the proposed Phase I project, reviews current safety issues on Depot Road and assesses vehicle sight distance at both site driveways. The following is a summary of that information:

Phase I Site Traffic, the volume of site trips generated by the proposed Phase I elderly apartment project was estimated based upon trip tables presented in the seventh edition of the "**TRIP GENERATION**" manual published by the Institute of Transportation Engineers (ITE). The ITE publication provides numerous land-use categories and the average volume of trips that are generated by each category. Land-Use #252: Senior Adult Housing-Attached is generally considered the appropriate land-use category for elderly restricted apartment projects. The trip rates for both peak commuter periods and a typical weekday are presented as follows:

Weekday	= 3.48 trips per unit
AM Street Peak Hour	= 0.08 trips per unit
PM Street Peak Hour	= 0.11 trips per unit

Accordingly, the 24-unit apartment complex can be expected to generate 84 daily trips; 2 vehicle trips during the AM peak hour and 3 trips in the afternoon peak hour.

Safety History-Depot Road, the Maine Department of Transportation's Accident Records Section provided the latest three-year (2002 through 2004) accident records for the full length of Depot Road. MDOT's records are summarized as follows:

2002-2004 Accident Summary

Location	Number of Accidents	Critical Rate Factor
1. Depot Rd/River Rd/Chute Rd	4	1.08
2. Depot Rd/Main St	1	0.26

MDOT considers any intersection or roadway segment a high crash location if both of the following criteria are met within the study period:

- ***8 or more crashes***
- ***Critical Rate Factor greater than 1.00***

The number and frequency of traffic crashes found on Depot Road are well below the minimum standards set by MDOT for determining a high crash location.

Vehicle Sight Distance, the Maine Department of Transportation's 1994 publication "***Access Management – Improving the Efficiency of Maine Arterials***" provides a series of recommended roadway design standards, including driveway/intersection sight distance. The standard for a low and/or medium volume driveway are as follows:

Speed	Vehicle Sight Distance
20 mph	200 feet
25 mph	250 feet
30 mph	300 feet
35 mph	350 feet
40 mph	400 feet
45 mph	450 feet
50 mph	500 feet

Depot Road is currently posted at 30 mph, which in accordance with MDOT's standard requires an unobstructed sightline of 300 feet as measured from a height of eye 3½ feet above the pavement to an object 4¼ feet. Measurements taken at the more northerly site driveway, in both directions of travel, exceed 400 feet. The measured sight distance at the proposed southerly drive "looking" north, again, exceeds 400 feet. However, sight distance to the south towards Main Street is severely restricted (less than 200 feet) due to a very sharp vertical crest on Depot Road. Based upon our discussion Friday, it is recommended that the crest portion of Depot Road be lowered to a sufficient depth to provide a 300 foot unobstructed line of sight looking south from the proposed southerly site drive.

A more detailed traffic impact study will be prepared with submittal of the Phase II portion of the proposed Keddy Mill project.

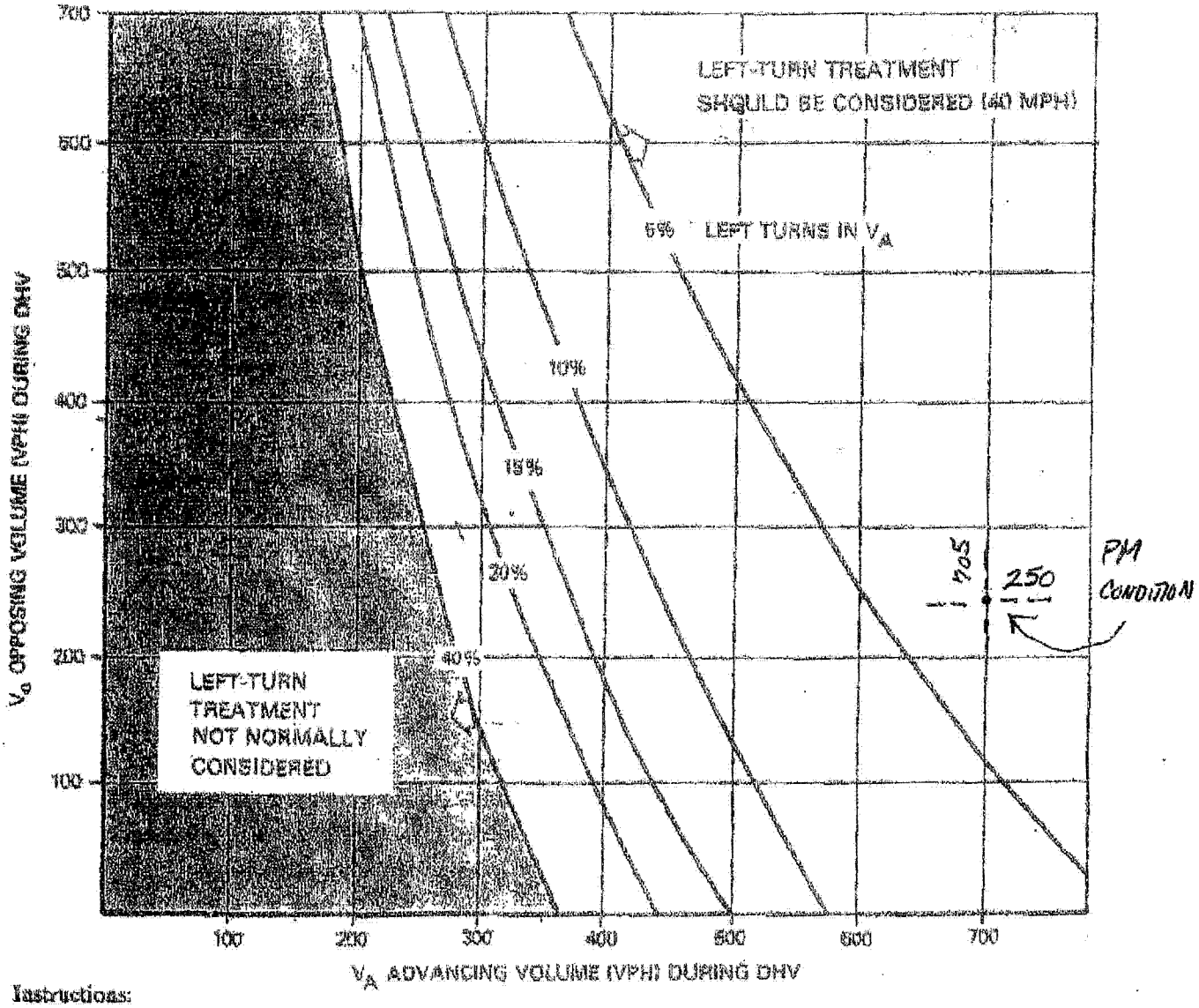
If you have any questions or require additional clarification, please don't hesitate to contact me at 363-1011.

Very truly yours,

William J. Bray, P.E.

VIL_RESP03215

AM CONDITION 951 837



Instructions:

1. The family of curves represent the percent of left turns in the advancing volume (V_A). The designer should locate the curve for the actual percentage of left turns. When this is not an even increment of 5, the designer should estimate where the curve lies.

2. Read V_A and V_o into the chart and locate the intersection of the two volumes.

3. Note the location of the point in #2 relative to the line in #1. If the point is to the right of the line, then a left-turn lane is warranted. If the point is to the left of the line, then a left-turn is not warranted based on traffic volumes.

VOLUME WARRANTS FOR LEFT-TURN LANES
AT UNSIGNALIZED INTERSECTIONS ON 2-LANE HIGHWAYS
(40 mph)

Figure 8-19

VIL_RESP03216

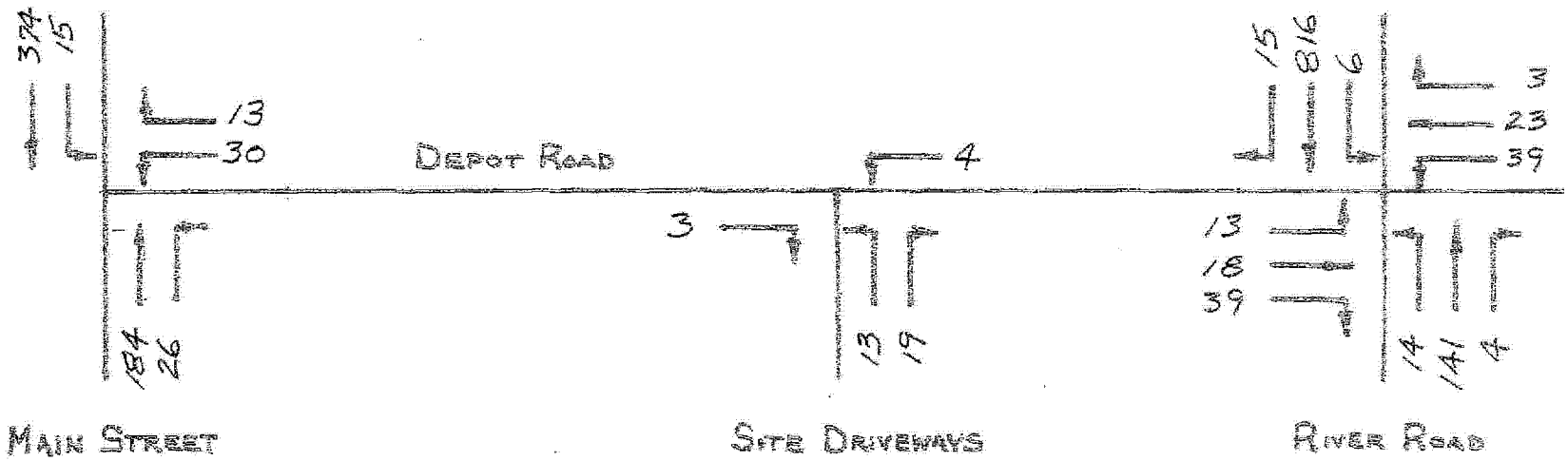


Figure 7: 2009 Post Development Traffic – AM Peak Hour

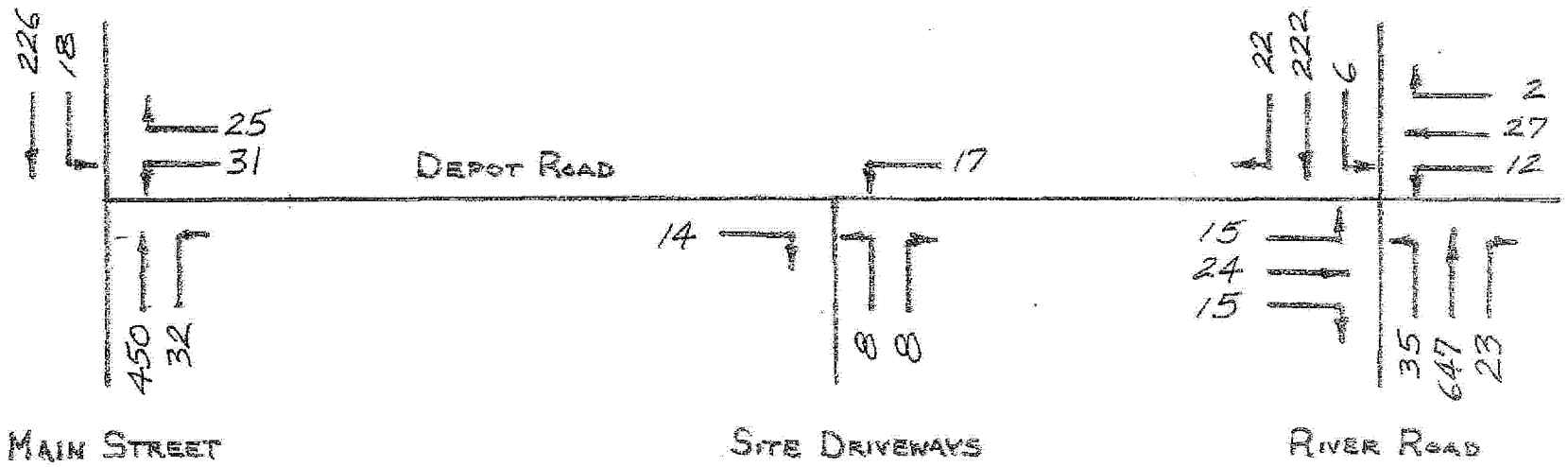


Figure 8: 2009 Post Development Traffic – PM Peak Hour

EXHIBIT 14

CONFORMANCE WITH TOWN SITE PLAN REQUIREMENTS

Revised 07/11/07

A: Conformance with Master Plan and Ordinances:
The proposed development has been designed in accordance with the standards outlined in the Town of Windham Ordinances and the Comprehensive Master Plan. The preservation of scenic vistas and natural features is an essential part of the Vision Statement of the Town's Comprehensive Plan. The removal of the abandoned mill and restoration of natural landscape along the Presumpscot River Village will greatly improve the scenic views along the river for the neighborhood.

Furthermore, the site is located in a "growth area" for the Town of Windham. The Comprehensive Plan encourages growth of "Village-like" developments in this area of town. This "Village-like" style has been incorporated into the proposed site layout and architectural features.

B: Harmony with Surrounding Area:
The visual quality and scenic character of the community will be greatly improved as a result of the proposed development. The dilapidated industrial building will be removed from the site and the riverbank will be restored to a natural vegetative state. In addition, the design, layout, and styling of the proposed development will match well with the character of the surrounding neighborhood.

C: Vehicular and Pedestrian Traffic Impacts:
The development will not create a hazardous condition for vehicular or pedestrian traffic in or around the development. Please refer to Exhibit 19 Appendix G of the Subdivision Application for additional information regarding traffic movement.

D: Effect on Adjacent Land Use:
The proposed development will have a positive impact on the land value of the surrounding neighborhood. The removal of the mill and associated site cleanup will improve the visual impact of the area. The razing of the mill will also remove a public safety hazard from the neighborhood. The site layout and architectural features have been designed in accordance with the natural topography of the site and the characteristics of the surrounding neighborhood.

E: Landscaping:
Landscaping has been incorporated into the design of the Village at Little Falls project in order to improve the aesthetics of the site. The landscaping will also provide screening for the dumpster and pump house. Please refer to the attached planset for Landscape Plans and Details.

F: Compliance with Town Guidelines:
The site's parking, pedestrian spaces, stormwater management, landscaping, signage and lighting has been designed in accordance with the contract zone and town guidelines.

Stormwater Management has been designed in accordance with town's Chapter 142 Surface Water Protection Ordinances. The increase in site runoff is not anticipated to increase peak flow rates of the Presumpscot River. Stormwater will also be treated through a filtration system to remove pollutants prior to discharge into the Presumpscot River. The plan also includes both temporary and permanent erosion control measures for the site as dictated by state and local codes. Please refer to Exhibit 11 for additional information regarding Erosion Control Measures and to Exhibit 19 Appendix F for additional information regarding Stormwater Management.

The proposed development has been designed with input from the Windham Fire Rescue Department. The development includes 4 new fire hydrants and all units will be sprinklered, and all buildings will comply with the requirements of Chapter 95 Fire Prevention.

In addition, the layout conforms with design requirements outlined in the Contract Zone, the Vehicle and Traffic Ordinance Chapter 227, Land Use Requirements in Ordinance Chapter 140, and Subdivision Requirements in Ordinance Chapter 213. Please refer to Exhibit 19 of the Subdivision Application for more information regarding site compliance.

EXHIBIT 18

COMMUNITY FACILITIES IMPACT

Revised 07/09/07

Construction will commence upon receipt of all necessary permits and approvals, and has an anticipated start date of October 2007. The project will be constructed in a three-year build out process. However, some construction activities must be completed prior to the sale of any condominium unit. These items include the removal of the mill, shore restoration, sewer pump station installation, sewer upgrade along Depot Street, and stormwater treatment/detention systems. In addition, the portion of the sewer, water, gas, power, and stormwater lines that service the unit must be installed prior to sale.

Public sewer and water will service the development. Exhibit 10 includes correspondence with the Portland Water District (PWD). The water district is currently upgrading the sewer system in the South Windham area. These improvements include upgrades along Depot Street and the replacement of two pump stations with a single new pump station to be located on the Village at Little Falls' site. After these upgrades are competed, the Portland Water District will have adequate capacity to treat and convey the wastewater from the development. No upgrades to the existing water system are required. The Portland Water District currently has an adequate capacity of water to service the development.

Furthermore, the development will not increase stormwater discharge into the public stormwater system. The stormwater will be collected in the proposed catchbasin system and discharge directly into the Presumpscot River after treatment. The increase in site runoff is not anticipated to increase peak flow rates of the Presumpscot River.

The project will have minimal impact on the community facilities and services. The development will be serviced by private streets, and thus will not require town maintenance or public snow removal. The maintenance of Village at Little Falls street network will be the responsibility of the condominium owner's association. In 2004, VLF, LLC commissioned a study to examine the impact of a residential development on school enrollment for the Town of Windham. The conclusion of the study indicated that 0.10 student increase would be realized for every condominium unit constructed. Therefore, this development will likely increase student enrollment by 8 students. See attached April 9, 2007 memorandum on "Effect of Housing Development in Windham on School Enrollment".

The abandoned mill is a hazard to public safety. The abandoned mill attracts vandals to the area. Recently, arson fires have been set on the property. By removing the mill and developing the site, the project will be removing a burden from the local police and fire departments.

The development will significantly raise the real-estate value of the property, thus increasing the Town's tax revenue. This increase in tax revenue will offset the impact on community facilities. The applicant will also be contributing funds to the improvements along Depot Street and the

construction of a sewer pump station. In addition, HRC-Village at Little Falls, LLC will be contributing $36,000 to the town's recreational fund.

The applicant has contacted the Maine Historic Preservation Commission in order to determine the development's potential impact on historical sites. The MHPC has requested a Phase II archaeological survey of the area. Attached in Appendix E of Exhibit 19, please find a copy of the correspondence with MHPC. A MHPC approved archeologist will perform this survey in the spring of 2007. The results of the survey will be forwarded to the town upon completion.

NCS

Northeast Civil Solutions
INCORPORATED

tel

fax

July 11, 2007

Mr. Greg Novick
StormTech
8 Blue Moon Drive
North Yarmuth, Maine 04097

RE: Village at Little Falls, Windham

Dear Greg,

Enclosed please find the grading and underground detention details for the Village at Little Falls in Windham. We are proposing a StormTech subsurface filter for this development. We would be greatly appreciate it if you could review and comment on these plans. If you have any questions, or concerns please feel free to contact me at anytime. We appreciate your time. Thank you.

Sincerely,
Northeast Civil Solutions, Inc.

Denise Cameron, PE
Project Engineer

Encl: Plans

VIL_RESP03226

MAINE HISTORIC PRESERVATION COMMISSION
55 CAPITOL STREET
65 STATE HOUSE STATION
AUGUSTA, MAINE
04333

JOHN ELIAS BALDACCI
GOVERNOR

EARLE G. SHETTLEWORTH, JR.
DIRECTOR

June 27, 2007

Ms. Denise Cameron
Northeast Civil Solutions
153 U.S. Route 1
Scarborough, ME 04074

RE: MHPC 3091-05, Village at Little Falls, Windham

Dear Ms. Cameron:

My staff archaeologist, Dr. Arthur Spiess, has reviewed the Phase II archaeological survey report for this project by Dr. Stuart Eldridge, NEA, dated June 2007. The report is acceptable as written, and we agree with the conclusions in the report, specifically that niether archaeological site 8.20 nor any other site will be affected by the project.

I find that there will be no historic or archaeological properties affected by the proposed subdivision.

Sincerely,

Earle G. Shettleworth, Jr.
State Historic Preservation Officer

cc: Stuart Eldridge

PHONE: (207) 287-2132

VIL_RESP03228

FAX: (207) 287-2335

OAK
ENGINEERS
Civil Engineers & Land Surveyors

VLF

COPY

June 12, 2007

Project 064006-02

Lee D. Allen, P.E.
Northeast Civil Solutions
153 U.S. Route 1
Scarborough, Maine 04074

RE: Structural Condition Investigation
HRC Village at Little Falls, LLC
South Windham, Maine

Dear Lee:

Oak Engineers, LLC. (Oak) has completed structural condition investigation of the existing power plant and abandoned mill building foundations at the above site in accordance with our agreement dated March 12, 2007. The purpose of this investigation is to assess existing conditions and determine viable options for installing a retaining wall adjacent to the power plant property, which is currently owned and operated by Sappi. We understand that the proposed retaining wall must support the adjacent property without removing any of the existing back fill materials or disturbing the structure.

SCOPE OF INVESTIGATION

The investigation included the following tasks:

1. A site visit was conducted on February 8, 2006, and on March 29, 2007, by engineers from Oak to visually observe structural conditions of the mill building foundations and adjacent Sappi power plant. Mr. Tom Howard of Sappi provided access to the existing power plant during the March 2007 visit and provided general information regarding the power plant building's construction.

2. During the March visit, a dimensional survey of important building components and surrounding grades was conducted by Oak.

3. Existing conditions plan and section of the mill building and adjacent property was developed based on the field survey and information provided by Sappi (see Attachment)

4. An engineer evaluated existing structural conditions as well as subsurface information provided in a geotechnical report previously provided by Oak (report dated February 27, 2007) with respect to the proposed construction plans by Northeast Civil Solutions, Inc. (NCS).

Brown's Wharf, Newburyport, MA 01950
T: 978.465.9877 • F: 978.465.2986
www.oakengineers.com

5. Recommendations for design and construction of a retaining wall adjacent to the Sappi property and along the river were developed.

EXISTING CONDITIONS

Mill Building

The abandoned mill building is generally constructed of reinforced concrete columns, beams, and exterior walls, with either flat slab or ribbed floor construction. The south basement wall that is parallel to the river consists of 12-inch-thick concrete wall approximately 8 feet in height above the basement level floor slab and supports the exterior brick masonry walls extending three levels above the basement floor. It appears that the basement wall adjacent to the river is supported on concrete piers spaced approximately 25 feet apart.

The basement wall located at the west end of the building consists of approximately 48-inch-thick stone masonry wall extending approximately 8 feet above the elevated basement floor. Above the stone masonry, the wall is constructed of approximately 40-inch-thick brick masonry to the first-floor level. It appears that the upper brick masonry wall was originally above grade since large areas were blocked with concrete masonry units where windows once existed.

Water flows through open brick culverts (possibly penstocks) from the power plant property on the west side of the mill building and beneath the elevated structural floor slab in the basement. The water is directed and channeled through a system of concrete holding tanks and conduits beneath the slab and returns to the river beneath the building foundations on the south wall adjacent to the river.

Minor cracking or deterioration was observed in the south basement wall. The west basement wall appears to be stable at the stone masonry base. However, some buckling, patching, and localized structural failure was noted in the upper brick masonry wall.

The concrete walls, columns, and floors were sounded with sledge hammer in several locations and appeared to be sound.

Power Plant

The adjacent power plant building is constructed of cast-in-place concrete foundations and floor slabs with steel-framed and masonry superstructure. The powerhouse has three separate floor levels with elevations noted in the attached sketch provided by Sappi. The power house is connected to the existing mill building with a stone masonry foundation wall and upper concrete wall. There is a large opening in the stone masonry foundation wall approximately 4 feet wide by 8 feet high which provides access from the mill building to the tailrace area of the power plant.

The building appears to be is good condition and no significant damage was noted during our brief visit.

CONCLUSIONS

Based on the information obtained from this investigation, the following opinions regarding structural condition and the proposed construction are rendered:

- The existing power plant structure is not rigidly connected or attached to the mill building. Therefore, the proposed construction of a retaining wall should not disturb the existing structures.
- The mill building's basement wall adjoining the two properties is in poor condition.
- The existing open culverts beneath the mill building foundation wall are hydraulically connected to river flow.

RECOMMENDATIONS

Constructing the proposed retaining wall adjacent to the power plant is considered feasible; however, we recommend the following precautionary measures:

- Due to the poor condition of the existing basement wall adjoining the two properties, the existing wall should remain in place and be properly braced throughout construction of the proposed wall.
- The existing underground brick conduits must be either blocked in place or otherwise re-routed through the proposed wall. Further investigation of the implications of blocking these hydraulic structures is recommended, if blocking is the preferred alternative.

The following options were considered viable approaches for constructing the proposed retaining structure:

1. Soldier pile wall with lagging.
2. Rigid concrete retaining wall.

The first option would require steel H-piles spaced approximately 6 feet on center and socketed into sound bedrock. Additionally, the finished wall would most likely require either tie-backs or struts due to the proposed retained height and apparent depth to bedrock. Tie-backs would extend into the adjacent property and require anchorage into the bedrock, and therefore are not feasible for this project. Struts would require steel supports extending into the river bank and were considered to be costly and unsightly. Therefore, due to costs and aesthetics, we considered this option to be no longer feasible.

We recommend that the proposed retaining wall consist of reinforced concrete stem and foundation supported on micro-piles socketed into the bedrock. We believe micro-piles will provide adequate tensile

and compressive strength for the proposed wall foundations and, due to the wall's rigidity, tie-backs or struts will not be required.

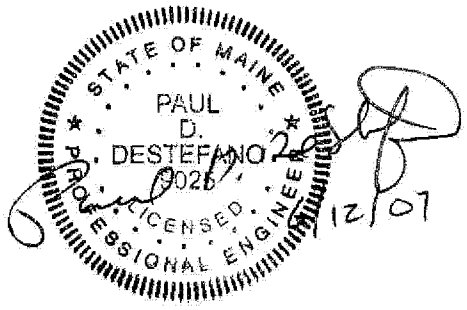
CLOSURE

This report has been prepared to assist in the design and construction of an earth retaining wall structure as part of the Village at Little Falls development in, South Windham, Maine. The recommendations have been presented on the basis of an understanding of the project as described herein, and through the application of generally accepted foundation engineering practices. No other warranties, expressed or implied, are made.

We thank you for the opportunity to provide structural engineering services to assist in developing plans for this project. Please call me if you have any questions regarding this report or need any further assistance. We will proceed with developing design plans and details for Option 2 above and according to our agreement unless you provide direction otherwise.

Sincerely,

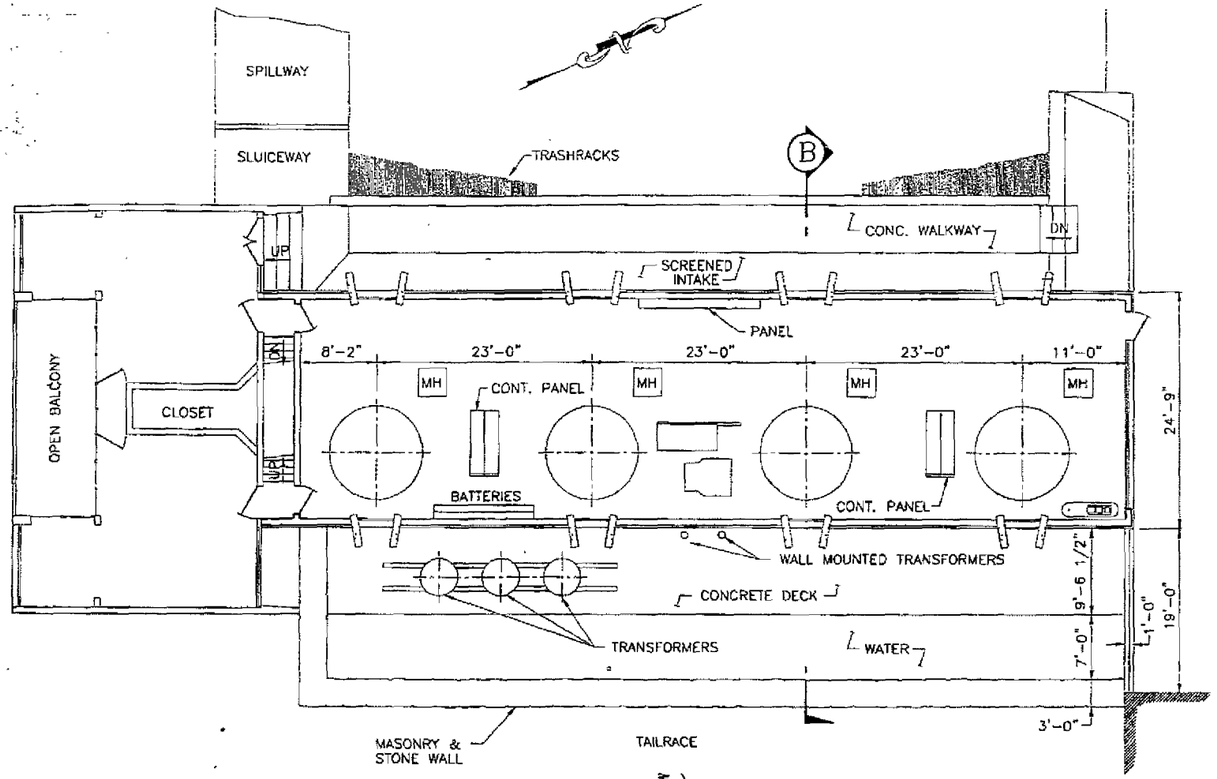
OAK ENGINEERS, LLC.



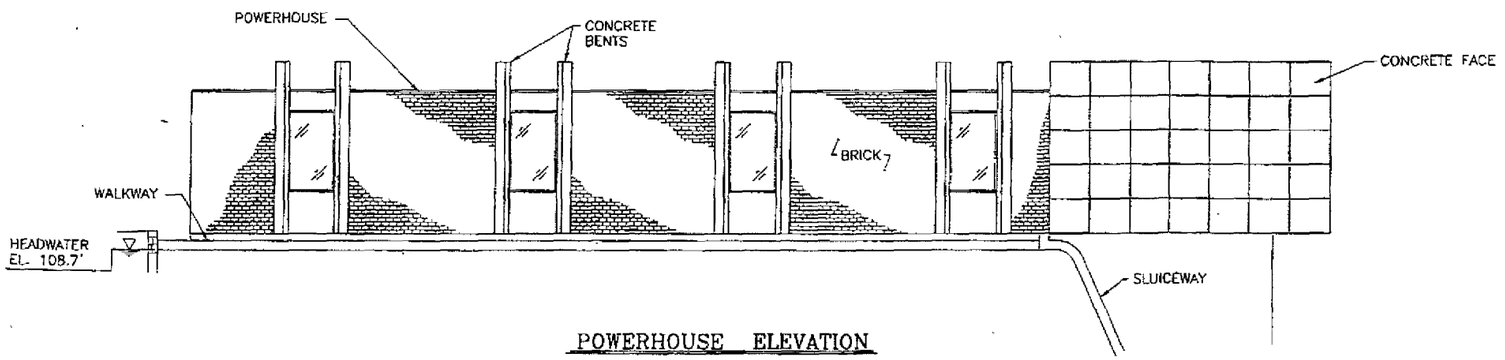
Paul D. DeStefano, Ph.D., P.E.
Director, Geotechnical and Structural Services

PDD:sh
Attachments

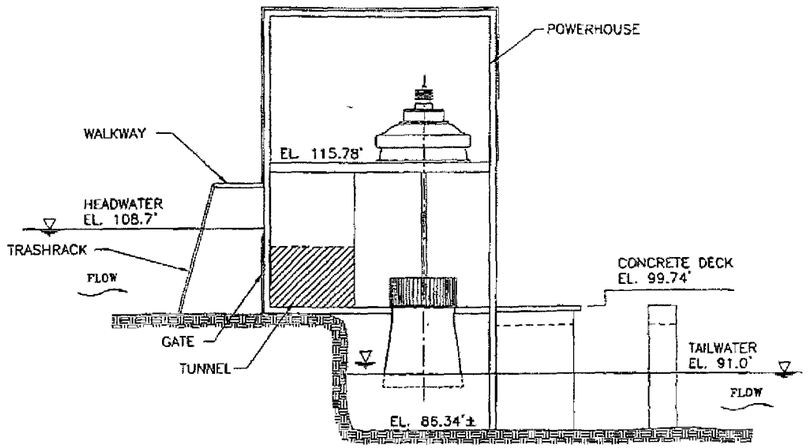
cc: Steve Etzel, Questor, Inc.
S. D. Warren Company



POWERHOUSE PLAN



POWERHOUSE ELEVATION



SECTION B

8 0 8 16
SCALE IN FEET

KA 023-057 12/98

Kleinschmidt Associates Consulting Engineers Pittsfield, Maine	SHEET NO. OF B-	Drawn by: TWG Date: 12-08-97 Checked by: Date: Approved by: Date: Scale: AS SHOWN	Date	Chkd.	Revision

NOTE: ALL ELEVATIONS ARE U.S.G.S. DATUM

THIS DRAWING IS A PART OF THE APPLICATION FOR A LICENSE BY THE UNDERSIGNED ON THIS 20th DAY OF Jan. 19 99
BY Thomas P. Howard S.D. WARREN.

NO.	REVISIONS	MADE BY CHK.BY	DATE

Kleinschmidt Associates
Consulting Engineers
Pittsfield, Maine

S. D. W. EQUIPMENT SYSTEMS NUMBERS

814-01.60-013	
876-000.60-004	
876-118.60-000	
814-01.60-000	

HYDRO ELECTRIC
LITTLE FALLS
POWERHOUSE PLAN AND SECTION

S. D. WARREN CO.
WESTBROOK, MAINE

DESIGN		SCALE	AS SHOWN
DRAWN	HWF	JOB ORDER	
APPROVED		DEPT	814-01
CHECKED	MCS	DATE	12-8-97
DWG NO.	CB-63341	SHT NO.	2 of 2
		REV	0

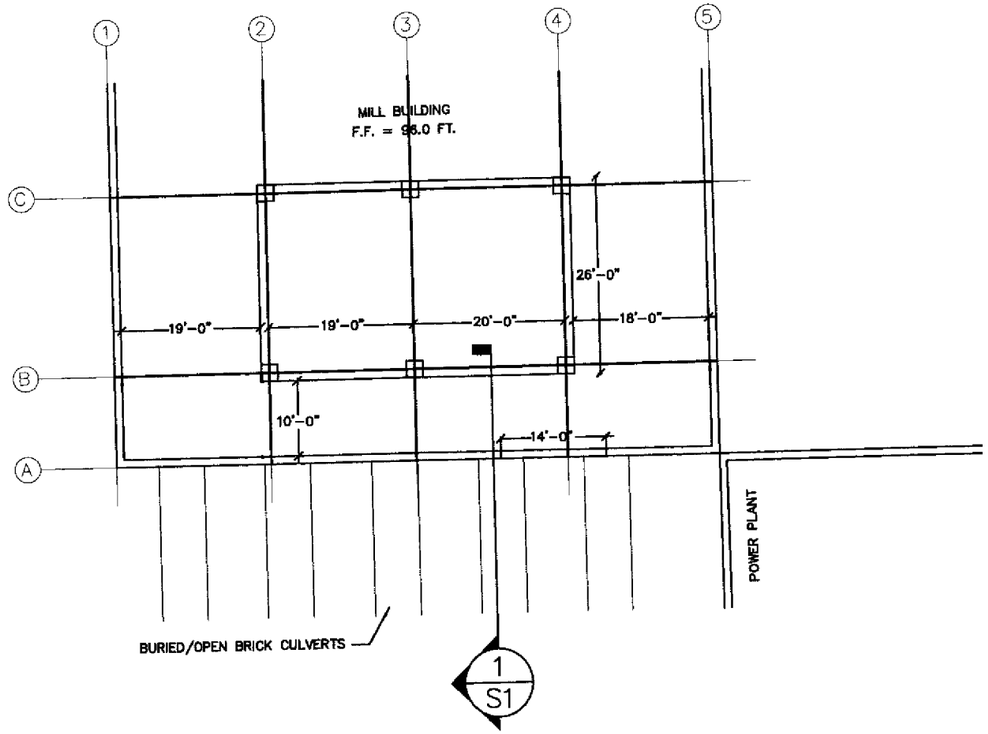
EXHIBIT F SHEET 2 OF 2

LITTLE FALLS PROJECT
FERC NO. 2941

POWERHOUSE PLAN AND SECTION

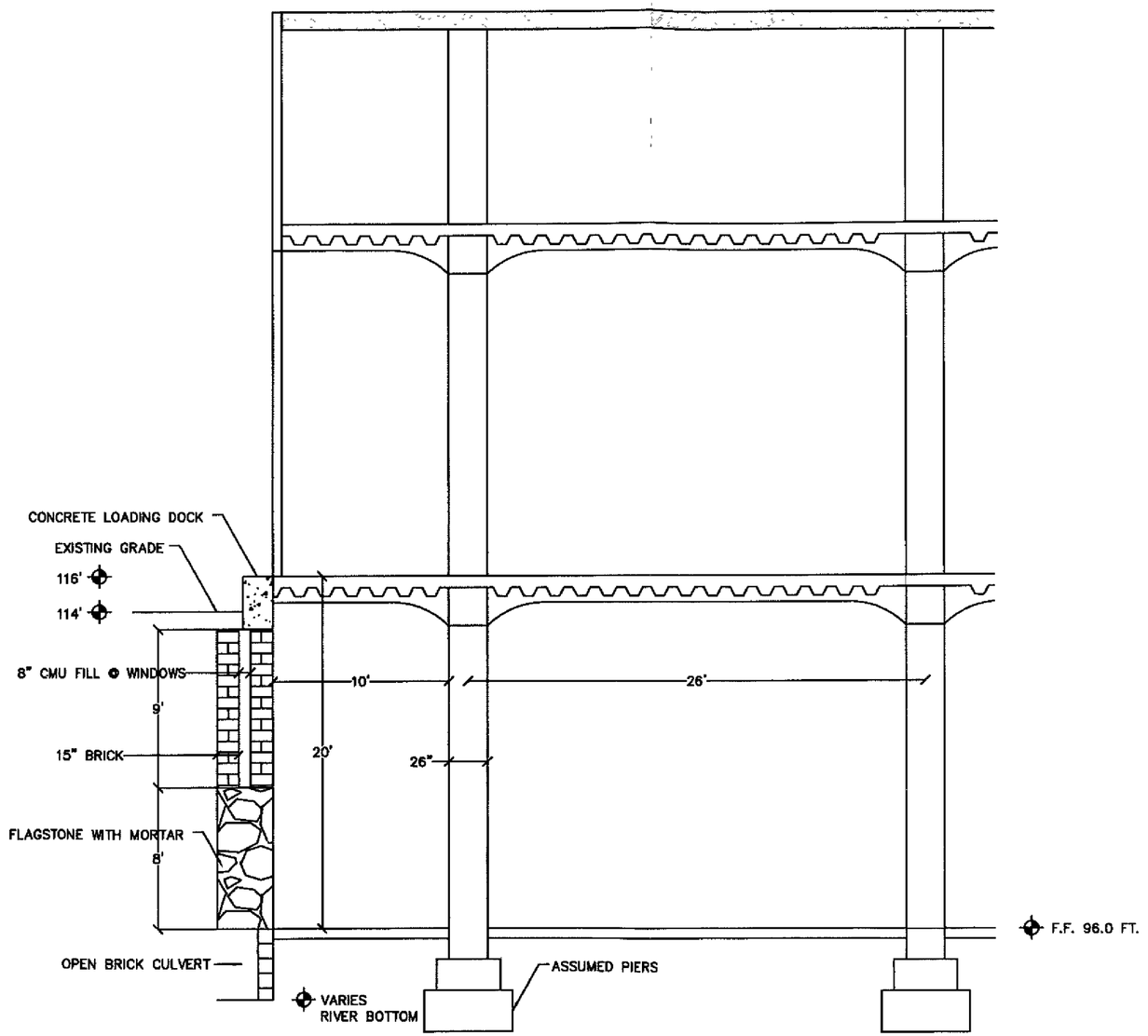
S.D. WARREN COMPANY
WESTBROOK, MAINE

VIL_RESP03233



PARTIAL SITE PLAN

SCALE: 1" = 40'



TYPICAL SECTION

SCALE: $\frac{1}{8}$" = 1'-0"

1
S1

VIL_RESP03234

OAK ENGINEERS
Brown's Wharf
Newburyport, MA 01950
(978) 465-9877

PREPARED FOR:
NORTHEAST CIVIL SOLUTIONS
153 US ROUTE 1
SCARBOROUGH, ME 04074

SITE:
VILLAGE AT LITTLE FALLS
13 DEPOT STREET
SOUTH WINDHAM, MAINE

DATE: JUNE 2007
PROJECT: 064006
FIGURE: 1

O:\2006\064006\Drawings\06400600.dwg

Gorrill-Palmer Consulting Engineers, Inc.
Traffic and Civil Engineering Services

PO Box 1237
15 Shaker Rd.
Gray, ME 04039

207-657-6910
FAX: 207-657-6912
E-Mail:mailbox@gorrillpalmer.com

July 5, 2007

Mr. Brooks More, AICP
Director of Planning
Town of Windham
8 School Street
Windham, ME 04062

Subject: Village at Little Falls
Stormwater Management, Traffic and General Engineering Peer Review

Dear Brooks,

As requested by your office, Gorrill-Palmer Consulting Engineers Inc. has conducted a peer review of the stormwater management, traffic and general civil engineering design aspects of the above referenced project. Our review has focused on:

- Whether the project appears to conform to standard engineering practice, and any revisions which may be desirable.
- Whether the project appears to conform to the requirements of the Town of Windham Zoning, Subdivision and Surface Water Protection Ordinances, and any revisions which may be desirable.

Information provided to Gorrill-Palmer Consulting Engineers Inc., as prepared by Northeast Civil Solutions, Inc. (NCS) includes:

- Preliminary Subdivision Application & Final Site Plan Application, Village at Little Falls, June 2007
- Village at Little Falls Plan Set, stamped "Preliminary Review 6-1-07"
- Subdivision/Site Plan Pre-Application, dated March 2007

Gorrill-Palmer's review of the application materials was limited to stormwater management, general engineering and traffic elements. Gorrill-Palmer's review specifically excluded the Voluntary Response Action Plan (VRAP), geotechnical report, condominium documents (except as related to site and stormwater management system maintenance), and Conditional Letter of Map Revision based on Fill (CLOMR-F). Gorrill-Palmer did not conduct a detailed review of water and sewer plans and details because we understand that Portland Water District (PWD) will review and approve the water and sewer plans.

Conformance to Standard Engineering Practice

The analysis conducted by NCS utilized the methodology outlined in "Urban Hydrology for Small Watersheds, Technical Release 55 (TR55), USDA, Soil Conservation Service for calculation of watershed area, curve number, and time of concentration. NCS utilized the HydroCAD Stormwater Modeling Program, which is based upon the routing methodology contained within Technical Release No. 20, USDA, Soil Conservation Service. The use of these programs is in keeping with the standard engineering practices within the State of Maine.

Stormwater Management Plan Review

Gorrill-Palmer reviewed the stormwater management report and plans and spot-checked the calculations. We present the following comments for your consideration and response as appropriate:

General Comments:

1. Since the development includes more than 3.0 acres of impervious area, it requires a Site Location of Development Act (SLDA) permit from the Maine DEP. The project is subject to the MDEP Stormwater Management Law (effective November 2005) and is required to meet Basic Standards and General Standards as defined in the Law. We understand that MDEP has agreed with the applicant that the MDEP Flooding Standard is not applicable to this project, due to direct discharge of stormwater to the Presumpscot River and the presumption of no significant impact on peak flows downstream of the site. Stormwater detention facilities to control peak rates of runoff from the development are therefore not required. Gorrill-Palmer has not reviewed the project for conformance to the MDEP Stormwater Management Law, nor for conformance with SLDA requirements.
2. The development proposes to use an underground detention and soil filter (StormTech) system and bioretention cells to provide water quality treatment required by MDEP Stormwater Law standards.

Stormwater Management Report:

3. Appendix B - The stormwater report shows an offsite drainage area of +/- 6.3 acres that presently drains into an existing culvert under the railroad tracks and flows across the property to the Presumpscot River. This drainage area includes High Street, several houses and open areas. This area appears to measure approximately 7.5 acres from the map provided in the report. The size of this drainage area should be confirmed using 1"=2000' scale USGS topographic maps.
4. Appendix I – The maintenance contract with Clean Harbors should specify that all components of the proposed stormwater management system will be maintained in accordance with the maintenance plan approved by the Maine DEP. The contract should also specify that the StormTech detention/filter system will be maintained in accordance with the Manufacturer's recommended maintenance plan.
5. Appendix L – The condominium association documents, Article 8, Section 8.2, should specify that Portland Water District will maintain the sewage pump station and sewer system, if that is the intent of the applicant.
6. Appendix L – Provisions i thru vi relating to stormwater management system maintenance should be revised to include maintenance of bioretention cells and maintenance of the StormTech detention/filter system in accordance with the manufacturer's recommended maintenance plan.

Exhibit 14, Conformance with Town Site Plan Requirements

7. Section F on page 2 states that "stormwater will be detained onsite in order to reduce stormwater discharge to rates less than predevelopment flows." A similar statement also appears on page 1 of Exhibit 18, Community Facilities Impact. These statements should be revised to indicate that increased site runoff is not anticipated to increase peak flow rates in the Presumpscot River.

Underground Detention/Filter System:

8. Gorrill-Palmer did not conduct a detailed review of the detention/filter system design. We assume that NCS will coordinate design details with the StormTech manufacturer's representative and that MDEP will review the design for conformance with MDEP Stormwater Law Standards.

9. The plans show the offsite area noted in the comment #3 draining into the proposed storm drainage system for the development, and flowing into the proposed detention/filter system. The stormwater calculations indicate that sizing of the detention/filter system is based on the proposed impervious and landscaped areas within the development, not including the offsite area. The applicant should request MDEP to confirm that the detention/filter system is appropriately sized to handle both onsite and offsite runoff as proposed.
10. Depending on MDEP confirmation of the detention/filter system sizing as noted in the previous comment, NCS may need to consider either bypassing the offsite flows around the system, or other modifications to the proposed design.
11. If the offsite drainage area is directed to the detention/filter system as designed, the plans should include sediment pretreatment measures for this offsite flow.
12. The plans appear to use catch basins with 3-foot deep sumps and hoods for sediment pretreatment of stormwater flows to the detention/filter system. NCS should provide sediment volume calculations based on MDEP requirements and confirm that adequate sediment storage volume is provided.

Plan Set Review

General Comments:

13. Notes referring to the Depot Street reconstruction plans should be added to each of the Grading and Drainage Plan, Site Plan, and Utility Plan sheets bordering Depot Street. Limits of construction, pavement sawcut locations, grading, utilities, drainage systems and other construction should be coordinated with the Depot Street Improvement plans. If the Depot Street Improvement Project may be constructed under a separate contract, the plans should contain specific information and notes to coordinate Depot Street construction with onsite construction.
14. Plans should include trench cap details conforming to Town and MDOT requirements for all proposed utility construction within Route 202 and Depot Street.

Sheet 2 of 38, Existing Conditions Plan:

15. The plan should be stamped by a surveyor licensed in Maine.
16. Abutting properties across Depot Street and the railroad ROW should be shown on this plan and the preliminary subdivision plan.

Sheet 3 of 38, Preliminary Subdivision Plan:

17. All State and Federal permits applicable to the project should be noted on the subdivision plan.
18. A note referring to the Conditional Letter of Map Amendment based on Fill (CLOMR-F), as approved by FEMA, should be included on the plan.
19. The source of the boundary survey should be clearly noted on the plan.
20. Note 20 should be revised when the Phase II archaeological survey has been completed.
21. The plan shows a "proposed 20' grading easement" within the existing railroad tracks on the east side of the project. The applicant should provide documentation that this easement has been approved by MDOT, and the Railroad if applicable.
22. Gorrill-Palmer assumes that a condominium plat plan suitable for recording at the Cumberland County Registry of Deeds will be submitted with the final subdivision application.

Sheet 4 of 38, Demolition Plan

23. This plan should include notes referring to fill requirements and other applicable provisions of the project geotechnical report.
24. A plan, details and specifications for the preload area should be provided.
25. A demolition-phase erosion control plan should be included in the plan set, showing required erosion control measures as stated in Note 3 on this plan.
26. Site access locations for demolition operations should be shown on the plan.
27. Note 4 states that "site cleanup and demolition must be limited to the parcel owned by HRC..." The plan should include appropriate easements relating to any work outside the site boundaries, specifically any work in the Railroad ROW (as shown on the Grading Plans, Sheets 7 and 8 of 38), and removal of the existing building that straddles the property line at the northeast corner of the site.
28. The existing railroad tracks abutting the site should be shown on the plan.

Sheet 6 of 38, Grading & Drainage Plan – Sheet 2

29. Grading at the proposed curb line along the south side of Depot Street does not show the 6" curb reveal.
30. Guardrail should be provided at the paved apron on the west side of the pump station generator building adjacent to the riverbank slope.
31. Note 7 refers to the Geotechnical Report by Oak Engineers dated February 27, 2007. The plan set and contract documents should clearly specify the contractor's responsibility to complete construction in accordance with the Geotechnical Report, as determined appropriate by NCS.
32. The riverbank restoration slope appears to be in the range of 1.7H:1V to 2H:1V. These slopes are proposed to be stabilized with erosion control blanket and plantings. The geotechnical report, page 14 (Fill and Backfill section) states that permanent slopes steeper than 2H:1V should be stabilized with riprap, and that river banks should not exceed 2H:1V. The applicant should submit slope stability calculations for the proposed riverbank slopes.
33. Proposed storm drains are located within 4 to 8 feet of units 17, 18 and 19, with the proposed storm drain approximately 9 feet below proposed finish floor. There appear to be similar proposed conditions at other locations within the development. NCS should confirm that proposed pipe materials are suitable for installation at locations close to foundations where the proposed pipe may be located within the soil support zone below the proposed building foundations. Future storm drain maintenance implications should also be considered.

Sheet 7 of 38, Grading & Drainage Plan – Sheet 3

34. The plan should include a note referring to the Depot Street Improvement Project, as on Sheet 6.

Sheet 8 of 38, Grading & Drainage Plan – Sheet 4

35. The plan shows a stabilized area (loam & seed over gravel) to access the DETENTION/FILTER system for maintenance. The Landscape Plan (L1) shows two proposed trees that appear to be within the access area. The access area should be kept clear of landscaping and other obstructions.
36. The proposed 30-inch storm drain to the StormTech detention/filter system (pipe P-2) appears to be +/- 5 feet off the building foundation and below the level of the footing, based on the floor elevations noted. NSC should confirm suitability of proposed pipe materials for proposed installation near building foundations and below the footing bearing zone (similar to comment #33).
37. The bioretention cell behind unit #66 appears to be located within several feet of the proposed storm drain to the detention/filter system, with a bottom of underdrain elevation near the top of the proposed storm drain.

The design should be reviewed to provide adequate separation between the bioretention cell and the storm drain.

38. This office recommends placement of cleanout risers at the ends of all underdrain pipe runs for the bioretention cells.

Sheet 11 of 38, Site Plan – Sheet 2

39. The barrier-free ramp at the northwest corner of the Sweetflag Drive/Lupine Lane intersection should be revised to align with the proposed crosswalk.

Utility Plans, General Comments

40. We assume that NCS will coordinate electrical service and other wire utility locations with CMP and other utility companies and will show the approved locations on the final plans.
41. Underground utility services to the proposed buildings should be shown on the final construction drawings.
42. The plans show several locations with proposed water lines and water valves located less than 5 feet away from proposed storm drain pipes and catch basin structures. We assume that NCS will coordinate with PWD to conform to their minimum pipe separation standards and all other PWD requirements.
43. Gorrill-Palmer assumes that NCS will coordinate with the Windham Fire Department for approval of hydrant locations and sufficiency of proposed fire flows within the development.
44. Utility Plan sheets 3 and 4 should include notes necessary to coordinate sitework and utility construction with proposed reconstruction of the existing 36-inch storm drain pipe across the site from Depot Street to the river. We understand that the storm drain reconstruction plans are being prepared under separate contract to the Town and that NCS is coordinating sitework design with the storm drain design by others.

Sheet 16 of 38, Utility Plan – Sheet 2

45. There appears to be an existing utility pole located within the proposed barrier-free ramp at the southeast corner of Depot Street & Trillium Drive. NCS should confirm that minimum required accessible route clearances are provided in accordance with ADA (Americans with Disability Act) Standards.

Road, Sewer and Water Profiles – General Comments

46. The profiles appear to show 5.5 feet of cover on water lines and less that 1 foot of vertical separation from sewer lines at several locations. We assume that NCS will coordinate with PWD to meet their minimum pipe separation requirements.

Sheet 23 of 38, Erosion and Sedimentation Control Plan – Sheet 1

47. As noted in comment #25, a demolition phase erosion control plan should be included in the construction plan set. That plan, or a supplemental plan for the initial site grading and fill phase, should delineate the preload area and any necessary erosion control measures and should include necessary Best Management Practices (BMPs) to control sedimentation after demolition before the site is stabilized (such as stone check dams, sediment traps, sedimentation basins, etc.).
48. This plan shows silt fence across proposed storm drain outlets. Silt fence is not appropriate for sediment control at concentrated flow points; other BMPs should be specified for such locations.
49. The erosion control plans should refer to the riverbank stabilization details on Sheet 26 of the plan set.
50. Slope stabilization requirements should be shown or noted on the erosion control plans.
51. The location of the construction fence should be coordinated with the grading plan in the area of the grading easement at the railroad ROW.

Sheet 24 of 38, Erosion and Sedimentation Control Notes

52. In general, the notes should be revised as necessary to incorporate provisions of the Erosion and Sedimentation Control narrative (Section 11) that apply to the construction phase. Some of the requirements stated in Section 11 do not appear to be included or appear to contradict the plan notes. These include stormwater diversion, dust control, slope stability and problem areas (Section 2.0); temporary non-structural measures (Section 3.0); permanent seed mixture (Section 4.0); and maintenance (Section 5.0).

Sheet 25 of 38, Erosion and Sedimentation Control Details

53. Additional erosion control details may be necessary to address the demolition and initial site grading phases of the project, such as stone check dam, sediment trap and sedimentation basin.

Sheet 26 of 38, Erosion and Sedimentation Control Details

54. The riverbank restoration plan view and profile should include notes that require construction in accordance with the project geotechnical recommendations.
55. Design calculations for the proposed riprap installation at the base of the slope should be provided. Calculations should address applicable requirements from the geotechnical report as well as riverbank protection requirements for a specific design flood.

Sheet 27 of 38, Underground Detention Details – Sheet 1

56. NCS should confirm the following design details for the detention/filter system with the StormTech manufacturer's representative:
    - The filter cross section shows the StormTech chambers wrapped in woven geotextile. Is this required for all rows of the proposed system?
    - The detention/filter system layout does not appear to direct stormwater flows to a single isolator row as typically recommended by the manufacturer.
    - We recommend that NCS confirm the size and specifications for the crushed stone material surrounding the chambers.
    - We recommend that NCS consider placement of geotextile material to separate the crushed stone chamber bedding and soil filter layers.
    - It appears that additional cleanout/inspection ports are needed.
    - The impermeable liner should be shown on the filter cross section.

Sheet 29 of 38, Drainage & Construction Details

57. The typical pipe section should note the type of pipe.
58. The precast concrete catch basin detail notes an RCP outlet pipe with a catch basin hood. Is RCP pipe proposed only for catch basin connections? If so, a detail for adapting to other types of storm drain pipe should be included.
59. Are catch basin hoods proposed for all catch basins?
60. A bioretention cell cleanout detail should be provided.

Sheet 33 of 38, Construction Details

61. A detectable warning strip conforming to ADA requirements should be added to the handicap ramp detail.
62. A typical section for Depot Street reconstruction should be provided.

Sheet 34 of 38 (S1), Proposed Retaining Wall Plan, Section, Elevations

63. Slope grading shown on the partial site plan does not appear to agree with the grading plan (Sheet 6 of 38). The partial site plan shows a top of slope elevation 112 and 2H:1V slopes, compared to the grading plan which shows top of slope elevation 114 and approximately 1.7H:1V slopes, respectively. The plans should be revised accordingly.
64. The extent of riprap shown on the elevation view does not appear to match the riprap detail shown on the riverbank protection detail (sheet 26 of 38). These two plans should be coordinated and revised accordingly.

Sheet 38 of 38, Plan & Profile – Depot Street

65. The plan view should show all proposed construction, including pavement sawcut locations, new pavement, limits of construction, proposed grades, fill slopes, etc.
66. A note referring to the proposed site construction plans and requiring the contractor to coordinate construction with onsite work should be added to the plan.
67. The plan should note that any existing ROW monuments or other survey markers disturbed by construction shall be reset by a Maine-licensed Land Surveyor in accordance with Town Standards.
68. Any required alteration of existing catch basins, sanitary manholes, fire hydrants or other utility structures should be noted on the plans.
69. The plan appears to show proposed sewer replacement extending south on a side street from manhole SMH-5. Limits of construction should be shown on the plan, or plans should be provided for construction extending beyond the limits of this plan sheet, if applicable.

Traffic Review

Gorrill-Palmer reviewed the traffic study prepared by Bill Bray and dated March 2007. We also completed a site visit on June 2, 2007. The study was completed in accordance with current industry standard practice. We present the following comments for the applicant's consideration and response as appropriate:

1. We concur with the trip generation, traffic volume adjustments, and crash analysis. We would question the full occupancy date of 2009, but given the 1% annual adjustment to the background volumes, we would not expect that a study horizon several years later would affect the conclusions of the study.
2. The capacity analysis showed only one movement below level of service "D" out of the several intersections that were studied. This was the Chute Road westbound thru-left turn movement at River Road. The volumes indicate only 3 right turns out of Chute Road, which would not justify a separate turn lane. The volumes exiting Chute Road would not likely satisfy a signal warrant; therefore, the lower level of service is acceptable.
3. The study did not address the potential need for a left turn lane on River Road at Depot Street. Since the proposed project sends the majority of the site-generated traffic through this intersection, we suggest that a left turn warrant evaluation be provided.
4. The MaineDOT crash summary report should be provided for our review.
5. The traffic study discusses only two driveways in the sight distance analysis. The plans show three driveways and an emergency vehicle access. The Depot Street Plan & Profile (Sheet 38 of 38) indicates that Depot Street will be reconstructed in the vicinity of Trillium Lane to achieve a minimum 250 feet of sight distance. Based on our field review and this plan, sight distances appear to be adequate. However, the applicant should clarify the driveway situation and provide there own assessment of the sight distances.

Closing

Our office is available to review any revisions to the plans to address the items noted above. Please contact this office with any questions.

Sincerely,

Gorrill-Palmer Consulting Engineers, Inc.

Lawrence R. Bastian, P.E.
Senior Engineer

Enc.
Copy: Lee Allen, Northeast Civil Solutions, Inc.
Steve Etzel, HRC

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OAK
ENGINEERS
Civil Engineers & Land Surveyors

COPY

June 1, 2007

Project 064006 BG 003

Lee D. Allen, P.E.
Northeast Civil Solutions
153 U.S. Route 1
Scarborough, Maine 04074

RE: Supplemental Geotechnical Investigation
Village at Little Falls, LLC
7 to 13 Depot Street
South Windham, Maine

Dear Mr. Allen:

Oak Engineers, LLC (Oak) has completed supplemental geotechnical investigations of the above site in accordance with our proposal for additional geotechnical engineering services dated April 9, 2007, and subsequently authorized on April 19, 2007.

SCOPE OF ADDITIONAL INVESTIGATION

The purpose of these additional investigations is to further define and evaluate the effects of underlying soft organic clay deposits, which were discovered in our previous subsurface investigation and reported on February 27, 2007, on the proposed development. The primary objective is to refine recommendations for deep foundation and pre-loading requirements described in "Area 3" of the previous report.

Subsurface Exploration (Area 3)

Additional subsurface exploration methods consisted of soil test drilling. Eleven test borings (B201 through B211) were advanced with 2¼-inch inside diameter (i.d.) hollow-stem steel augers, at the approximate locations indicated on the attached plan included as Attachment A, to a maximum depth of 42 feet below the ground surface (bgs). Soil samples were obtained from each test boring with split-barrel spoon samplers at continuous and nominal 5-foot intervals as directed by Oak's geotechnical engineer. In general, continuous samples were obtained throughout the soft clay deposits. Standard penetration resistance tests were performed and recorded at each sampling interval in accordance with ASTM D 1586 procedures. At soil boring B208, a single undisturbed soil sample was extracted from the underlying soil layers using a thin-walled Shelby tube in according to ASTM D 1587 procedures. One 5-foot NQ rock core sample was collected from test boring B205, from approximately 17 feet to 22 feet bgs. Both the soil and rock samples were returned with the field drilling logs to Oak's office for further analysis and review.

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www.oakengineers.com

Laboratory Testing

Soil samples were visually classified by a geotechnical engineer in general accordance with ASTM D 2487 Unified Soil Classification System (USCS) in Oak's office. The Shelby tube soil sample was transported to a certified soil testing firm's office (Geotesting Express, of Boxboro, Massachusetts) for laboratory analysis and testing. Laboratory testing included consolidated undrained (CU) triaxial compressive strength and vane shear testing. All testing was conducted in accordance with accepted ASTM procedures. Final soil boring logs were prepared by an engineer on the basis of visual classification of soil and rock core samples, laboratory test results, and field drilling logs and are included as Attachment B. A description of geotechnical terms and soil classifications are also included in Attachment B. Complete laboratory analysis and test results are included in Attachment C.

Geotechnical Evaluation

The geotechnical engineer evaluated subsurface conditions relative to the proposed development on the basis of field reconnaissance and subsurface exploration, project description, local geology, and laboratory analysis and testing in accordance with generally accepted geotechnical engineering principles and practices. According to our agreement, the geotechnical engineer evaluated subsurface conditions and provided modified recommendations for the following project elements:

1. Site preparation
2. Building foundations
3. Floor slabs
4. Construction quality control

SUBSURFACE CONDITIONS

Soil Test Borings

Apparent Subsurface Profiles depicting the proposed construction, existing topography, and interpreted soil profiles were revised and are shown on drawings C2.0 and C2.1 in Attachment A. For the purposes of this supplemental report and the related development, soil test boring results are generally described as follows:

1. Soil samples from supplemental test borings B201 through B211 consisted of fine to medium sand with lesser amounts of fine gravel and silt to approximately 5 to 15 feet bgs. Several samples contained one or more: concrete, coal ash, bricks and organic fibers within these sampling depths. Relative density of the soil samples generally varied from loose to firm. However, in test borings B203, B209, and B210 the soil samples were very loose to approximately 10 feet bgs.

2. Very soft to soft bluish gray clay was recovered from test borings B204, B207, B208, B209, B210, and B211 and ranging in depths 15 to as deep as 38 feet bgs. Soil samples observed in test borings B201 and B202 at depths ranging from approximately 15 to 30 feet bgs were predominantly stiff mottled clay.

3. Test borings spoon or auger refusal was encountered in test borings B201, B202, B204, B207, and B209 and varied in depth from approximately 20 to 40 feet bgs. Test borings B203, B205, and B206 encountered refusal at depths varying from approximately 10 to 17 feet bgs.

4. Petroleum odors were noted in the soil samples obtained from test boring B202 from approximately 5 to 30 feet and in test boring B203 at approximately 10 feet bgs.

Rock Core Sampling Results

One rock core sample was collected in boring B205 from approximately 17 to 21 feet bgs. The recovered rock core sample comprised predominantly sandstone and quartz. The medium-gray rock was very hard, moderately fractured, with relatively thin bedding planes inclined at approximately 45 degrees. The rock core recovery ratio was near 100 percent.

A rock quality designation (RQD) was calculated for the retrieved bedrock core specimens. The RQD is used to assess the structural integrity of a rock mass and is defined as the cumulative length of rock core pieces longer than 10 centimeters (cm), divided by the total length of the core run. Based upon the bedrock core obtained in B205, the RQD value was 70 percent.

Ground Water

Damp to saturated soil samples were recovered throughout each of the borings. The soil samples were observed to be wet or saturated from approximately 10 feet bgs to boring termination in most test borings. Soil samples were wet or saturated at approximately 20 feet bgs to boring termination in test borings B202, B204, and B211.

Laboratory Test Results

Results of laboratory testing are summarized below, with supporting laboratory results included as Attachment C.

Table 2: Summary of Soils Consolidation and C-U Triaxial Test Results

Depth	Preconsolidation Pressure (P_c)	Compression Index (C_c)	Recompression Index (C_r)	Initial Void Ratio (e_0)	Vane Shear Strength (S_u) remolded	Coefficient of Consolidation (C_v)
B208, 17–19 ft.	1,000 psf	0.538	0.0448	1.24	40 psf	2.0×10^{-4} in^2/sec

CONCLUSIONS AND RECOMMENDATIONS

The geotechnical engineer interpreted subsurface conditions with respect to the proposed construction on the basis of field exploration, laboratory analysis, and visual classification of soil samples within the designated Area 3 shown in Attachment A. Revised design parameters and construction recommendations are provided below according to an analysis of subsurface conditions disclosed by both the previous and this supplemental investigation and accepted geotechnical engineering principles.

In general, the additional investigations performed confirmed the need for deep pile foundations and preloading soils in a portion of the site. The areas requiring preload and deep foundations are depicted on drawing C3.0 in Attachment A. Due to the highly variable subsurface conditions, careful construction sequencing of the fill and settlement monitoring is recommended.

Subsurface Conditions

In general, the overburden soils consist of very loose to loose silty granular fill soils (SM, GM-SM) containing miscellaneous construction debris consisting of wood, concrete, bricks, coal, ash, and little to trace amounts organics varying in depths of approximately 5 to 20 feet bgs. These deposits overlie the native Presumpscot silty clay deposits which vary in depths from approximately 10 to as much as 40 feet bgs. The strength and compressibility generally decreases with increasing depth. The deep soft clay soils are considered to be of low to moderate strength and high compressiblity.

Permanent ground water levels are anticipated to be well below the proposed excavation levels for building foundations and utilities on site. However, the proposed retaining wall adjacent to the on-site power plant will require foundations that extend below groundwater and the adjacent river and dewatering will be required for installation of foundations.

For the purposes of seismic design, the soil profile within the designated Area 3 of the property is *Site Class E* according to *Minimum Design Loads for Buildings and Other Structures* (ASCE 7-02) published by American Society of Civil Engineers (ASCE).

Site Preparation

Site preparation should commence by relocating underground utilities and demolishing all structures within the footprint of the proposed on-site construction. All existing underground utilities located

beneath the proposed foundations should be relocated to outside building perimeters. Underground structures beneath the proposed buildings or pavements should be removed to at least 2 feet below proposed foundation and pavement subgrade levels, and 2 feet below finished grades in landscaped areas. The basement area of the existing building should be filled to subgrade level. The surficial soils should then be stripped of all pavements, topsoil, and organics within the proposed building and pavements.

After clearing and stripping the site, subgrades beneath the proposed buildings, pavements, and fill areas should be proof-rolled with several passes of a 15-ton vibratory roller traveling at slow speeds in each perpendicular direction. All weak and unstable subgrades observed by pumping and weaving during proof-rolling or resulting in depressions greater than one-half of an inch after several passes of the roller should be undercut a minimum of 12 inches and backfilled. According to proposed site plans, significant amounts of fill will be required to increase the existing site grades to proposed subgrade level.

Settlement Analysis

Based on the results of this investigation, approximately 5 to 15 feet of fill (average ~ 10 feet) will be required to increase site grades beneath buildings, roads, and parking areas in the areas found to underlain by soft compressible clay and organic soils. Assuming that fill soils are placed in incremental lifts during a period of approximately one month, we estimate that long-term settlements on the order of 6 to 8 inches may occur due to consolidation of the underlying clay soils after completion of the fill. We estimate that these settlements may continue for approximately 6 to 8 months after completion of filling operations.

Pre-load and Settlement Monitoring

In order to accelerate the time to reach estimated total settlements beneath the required fill, we recommend that the areas overlying the soft clay and organics be filled with Structural Fill as previously specified and pre-loaded with additional thickness of fill materials. The proposed limits of pre-loaded area are designated on C3.0 of Attachment A. According to our analysis, the pre-loading program should consist of placing an additional six feet thick soil layer above the proposed finished subgrade levels in the designated areas. We anticipate that the additional pre-load will enable construction of building foundations, pavements and utilities within approximately 2 to 4 months after placement of the pre-load.

In order to minimize the cost of materials, we recommend that the pre-load material be reused as fill in other portions of the Site. Preloading will require a carefully monitored subgrade settlement survey program within the proposed pre-loaded area during and after construction of the fill in order to determine the actual rate of settlement and projected time for settlements to dissipate. The program should be conducted under the supervision of a geotechnical engineer licensed in Maine.

Underground utilities and *final pavements* within the pre-loaded area should be installed outside the building perimeters *only after final site grade elevations are established and settlements have substantially dissipated*. Detailed requirements for placement of fill and backfill are provided in the previous report.

Foundations

Due to the presence of miscellaneous construction debris, organics and possible large voids within the existing surficial fill soils, deep foundations are recommended for support of buildings designated on drawing C3.0 of Attachment A. Considering the subsurface conditions and feasible foundation alternatives, we believe the designated buildings should be supported on deep foundations extending to a the underlying sound bedrock, which may range from approximately 10 to 50 feet below proposed foundations. Drilled piers would most likely require permanent casing to maintain stable excavations during installation and are not recommended due to their relatively high associated costs.

Economically feasible deep foundation options considered for this site are driven timber, pre-cast concrete and steel piles. Timber piles are considered to be the most economical for this site given the anticipated foundation loads, depth of suitable bearing stratum, and subsurface conditions. Accordingly, Oak recommends that the designated buildings be supported on timber piles driven to refusal on sound bedrock. It should be noted that pre-drilling or spudding may be required to penetrate through subsurface obstructions if driving stresses exceed the recommended values stated below.

On the basis of our analysis of subsurface conditions and the proposed construction, the following foundation design recommendations are provided:

1.	Pile Section:	Timber, ASTM D25
2.	Species:	Southern Pine
3.	Preservative Treatment:	AWPA C3
4.	Maximum Driving Stress:	3,000 psi
5.	Maximum Design Capacity:	15 Tons/pile
6.	Maximum Effective Driving Energy:	18 Kip-Ft./blow (Single-acting hammer)
7.	Maximum Vertical Batter	1H:10V
8.	Minimum Pile Spacing	2.5 x pile diameter

Piles should be designed and installed according to *Standard Guidelines for the Design and Installation of Pile Foundations* (ASCE 20-96) published by ASCE. For the purposes of bidding, construction documents should require a base-bid pile length equal to 35 feet, and unit prices should be provided to adjust for the final in-place pile length. The final pile tip depth should be determined in the field by using an acceptable driving formula or through dynamic pile load testing methods according to ASTM D 4945 (CASE) corresponding to the above allowable load capacity including a factor of safety equal to 2.0. Protective pile tips should be used to prevent damage due to driving through fill, obstructions, or into bedrock.

Floor Slabs

In buildings designated for deep pile foundation support, we recommend that both the living area and garage floors be designed and constructed as fully supported on foundation grade beams and timber piles as recommended above. The remaining building floor slabs may be designed and constructed as slab on grade and specified in the previous geotechnical report.

Construction Quality Control

The geotechnical engineer should be provided the opportunity to review the final design and specifications to ensure recommendations presented herein have been properly interpreted and applied. It is recommended that all backfill and compaction be inspected and tested by a qualified firm to ascertain that the proper materials are placed and adequately compacted. The geotechnical engineer should review all soil inspection and testing reports and monitor site development and foundation subgrade preparation to determine the necessity for additional cut and backfill beneath building subgrades. The geotechnical engineer should also review the contractor's subgrade settlement survey and monitoring program during the placement of fill and, on the basis of this survey, determine the time-rate of settlement and recommended sequence for installation of structures, utilities, and pavements in Area 3.

CLOSURE

This report has been prepared to assist the Site and structural engineers in the design and construction of foundations, pavements, and Site structures related to the proposed development at 7 to 13 Depot Street, South Windham, Maine. The recommendations have been presented on the basis of an understanding of the project as described herein, and through the application of generally accepted foundation engineering practices. No other warranties, expressed or implied, are made.

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The geotechnical engineer should be provided the opportunity to review the final design and specifications to ensure recommendations presented herein have been properly interpreted and applied. It is recommended that all backfill and compaction be inspected and tested by a qualified firm to ascertain that the proper materials are placed and adequately compacted. The geotechnical engineer should review all soil inspection and testing reports and monitor site development and foundation subgrade preparation to determine the necessity for additional cut and backfill beneath building subgrades. The geotechnical engineer should also review the contractor's subgrade settlement survey and monitoring program during the placement of fill and, on the basis of this survey, determine the time-rate of settlement and recommended sequence for installation of structures, utilities, and pavements in Area 3.

CLOSURE

This report has been prepared to assist the Site and structural engineers in the design and construction of foundations, pavements, and Site structures related to the proposed development at 7 to 13 Depot Street, South Windham, Maine. The recommendations have been presented on the basis of an understanding of the project as described herein, and through the application of generally accepted foundation engineering practices. No other warranties, expressed or implied, are made.

Mr. Lee D. Allen, P.E.
Northeast Civil Solutions

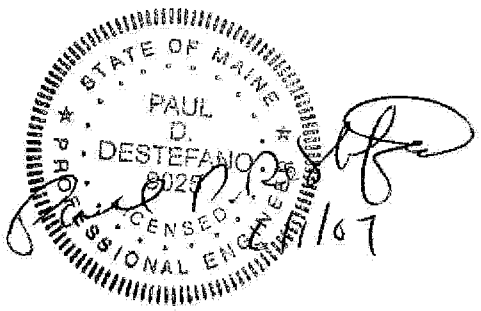
We have enjoyed working with you on this phase of your project. Should you have any questions regarding this report or require additional assistance, please do not hesitate to call.

Sincerely,

OAK ENGINEERS, LLC.

Diane Gagnon

Diane Gagnon
Project Engineer



Paul D. DeStefano, Ph.D., P.E.
Director, Geotechnical and Structural Services

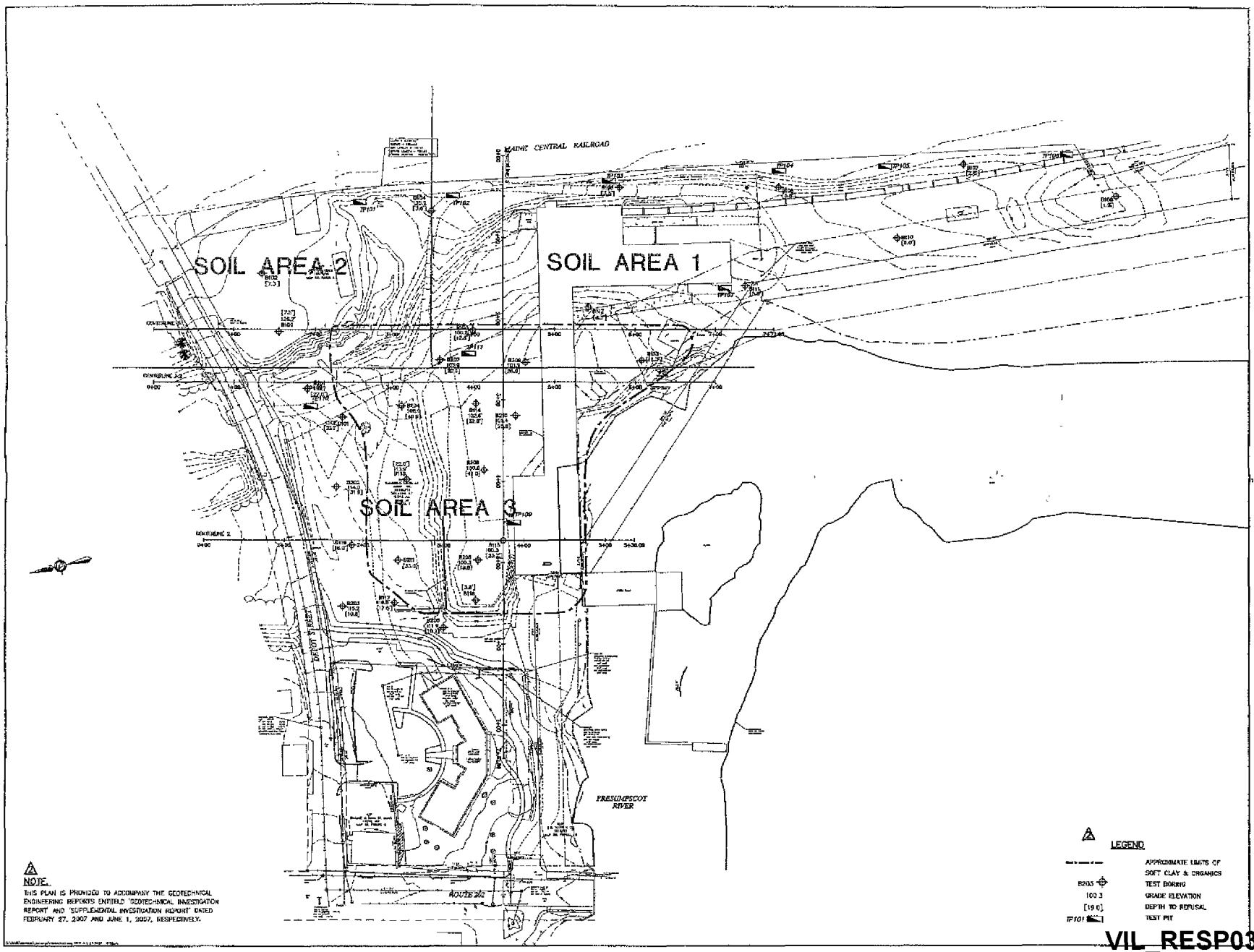
DEG/PDD:sh
Attachments

cc: Steve Etzel, Questor, Inc.

ATTACHMENT A

Figures

Supplemental Geotechnical Investigation
Village at Little Falls, LLC
7 to 13 Depot Street
South Windham, Maine



NOTE:
THIS PLAN IS PROVIDED TO ACCOMPANY THE GEOTECHNICAL ENGINEERING REPORTS ENTITLED "GEOTECHNICAL INVESTIGATION REPORT AND "SUPPLEMENTAL INVESTIGATION REPORT" DATED FEBRUARY 27, 2007 AND JUNE 1, 2007, RESPECTIVELY.

LEGEND

	APPROXIMATE LIMITS OF SOFT CLAY & ORGANICS
B203	TEST BORING
100.3	GRADE ELEVATION
[19.0]	DEPTH TO REFUSAL
TP101	TEST PIT

VILLAGE AT LITTLE FALLS
93 DEPOT STREET
SOUTH WINDHAM, MAINE

Prepared for:
NORTHEAST CIVIL SOLUTIONS
183 US ROUTE 1
SCARBOROUGH, ME 04074

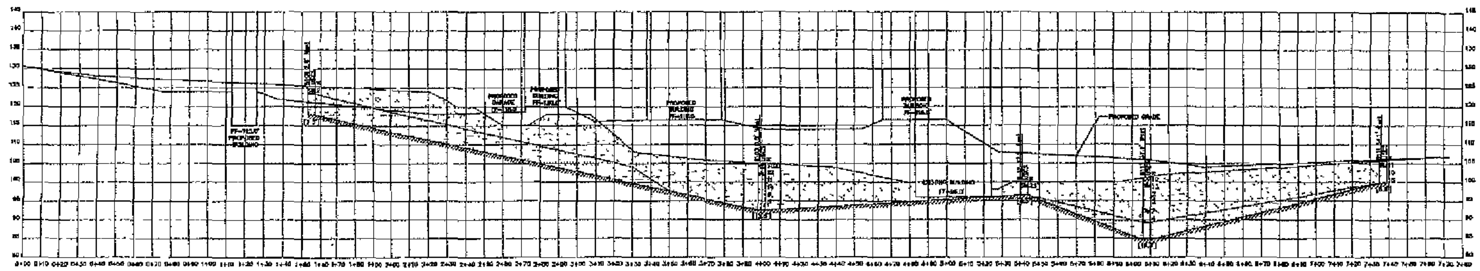
SCALE in FEET
1"=50'

OAK ENGINEERS
Brown's Wharf
Newburyport, MA 01950
Tel. (978) 465-6677
Fax (978) 465-2886
www.oakengineers.com

SUBSURFACE EXPLORATION PLAN

No	Revision/Issue	Date
2	REVISED PER DEP	6/07
1	SUPPLEMENTAL INVESTIGATION	5/07

Drawn by: DSC | Checked by: PDD
Approved by: PDD
Project: 054006 | Date: MAY 2007
Sheet: C1.0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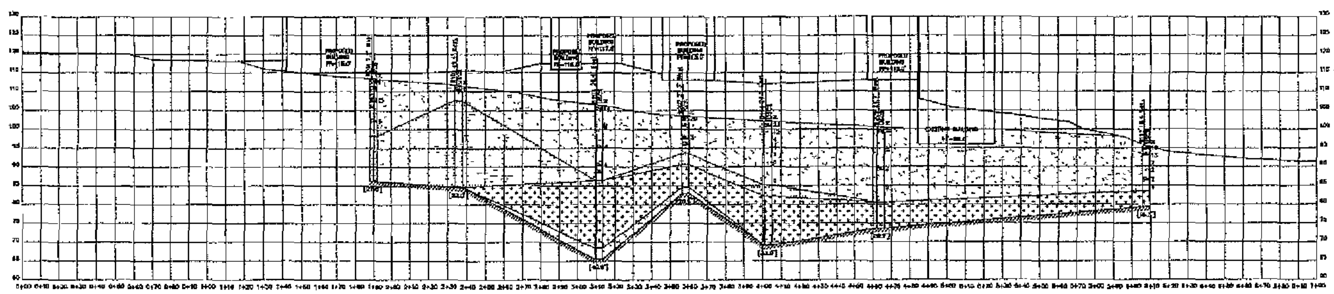

PROFILE 1.2 (REVISED MAY 2007)

LEGEND

Symbol	Description
(hatched)	APPARENT BEDROCK
(stippled)	SILTY SAND OR GRANUAR FILL
(sparse dots)	MEDIUM TO STIFF CLAY/SILT
(crosses)	ORGANICS/SOFT MARINE CLAY
N	STANDARD PENETRATION VALUE
USC	UNIFIED SOIL CLASSIFICATION

NOTE: (2)
THIS PLAN IS PROVIDED TO ACCOMPANY THE GEOTECHNICAL ENGINEERING REPORTS ENTITLED "GEOTECHNICAL INVESTIGATION REPORT" AND "SUPPLEMENTAL INVESTIGATION REPORT" DATED FEBRUARY 27, 2007 AND JUNE 1, 2007, RESPECTIVELY

VILLAGE AT LITTLE FALLS
13 DEPOT STREET
SOUTH WINDHAM, MAINE

Prepared for:
NORTHEAST CIVIL SOLUTIONS
153 US ROUTE 1
SCARBOROUGH, ME 04074

VERTICAL SCALE
0 30 60 120
SCALE In FEET
1"=60'

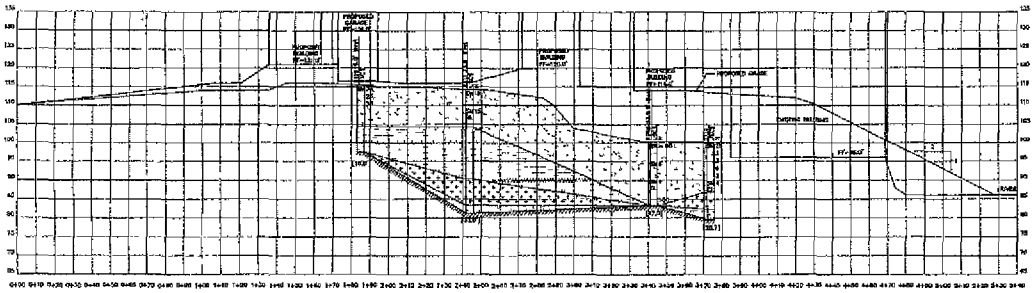
HORIZONTAL SCALE
0 15 30 60
SCALE In FEET
1"=30'

OAK ENGINEERS
Brown's Wharf
Newburyport, MA 01950
Tel. (978) 465-9877
Fax (978) 465-2986
www.oakengineers.com

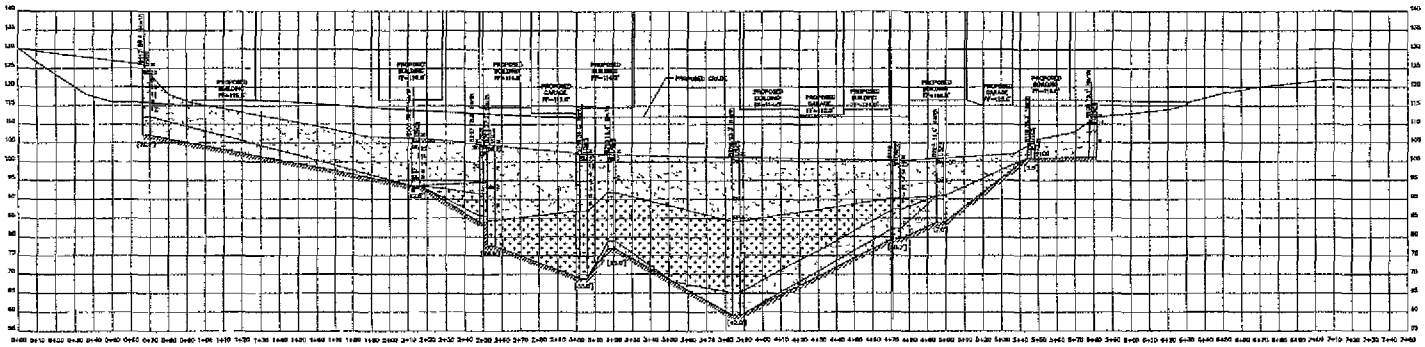
APPARENT SUBSURFACE PROFILES

No	Revision/Issue	Date
2	REVISED PER DEP	8/07
1	SUPPLEMENTAL INVESTIGATION	5/07

Design by: DEG	Checked by: PDD
Drawn by: DEG	Approved by: PDD
Project: 064006	Date: MAY 2007
Sheet: C2.0	



PROFILE 2 (REVISED MAY 2007)



PROFILE 3 (REVISED MAY 2007)

LEGEND

- APPARENT BEDROCK
- SILTY SAND OR GRANULAR FILL
- MEDIUM TO STIFF CLAY/SILT
- ORGANICS/SOFT MARINE CLAY
- N — STANDARD PENETRATION VALUE
- USC — UNIFIED SOIL CLASSIFICATION (ASTM D-2487)

⚠ NOTE:
THIS PLAN IS PROVIDED TO ACCOMPANY THE GEOTECHNICAL ENGINEERING REPORTS ENTITLED "GEOTECHNICAL INVESTIGATION REPORT" AND "SUPPLEMENTAL INVESTIGATION REPORT" DATED FEBRUARY 27, 2007 AND JUNE 1, 2007, RESPECTIVELY.

VILLAGE AT LITTLE FALLS
19 DEPOT STREET
SOUTH WINDHAM, MAINE

NORTHEAST CIVIL SOLUTIONS
153 US ROUTE 1
SCARBOROUGH, ME 04074

PAUL D. DESTEFANO 9052 — 6/07

VERTICAL SCALE
0 30 60 120
SCALE IN FEET
1"=60'

HORIZONTAL SCALE
0 15 30 60
SCALE IN FEET
1"=30'

OAK ENGINEERS
Brown's Wharf
Newburyport, MA 01950
Tel (978) 465-9677
Fax (978) 465-9685
www.oakengineers.com

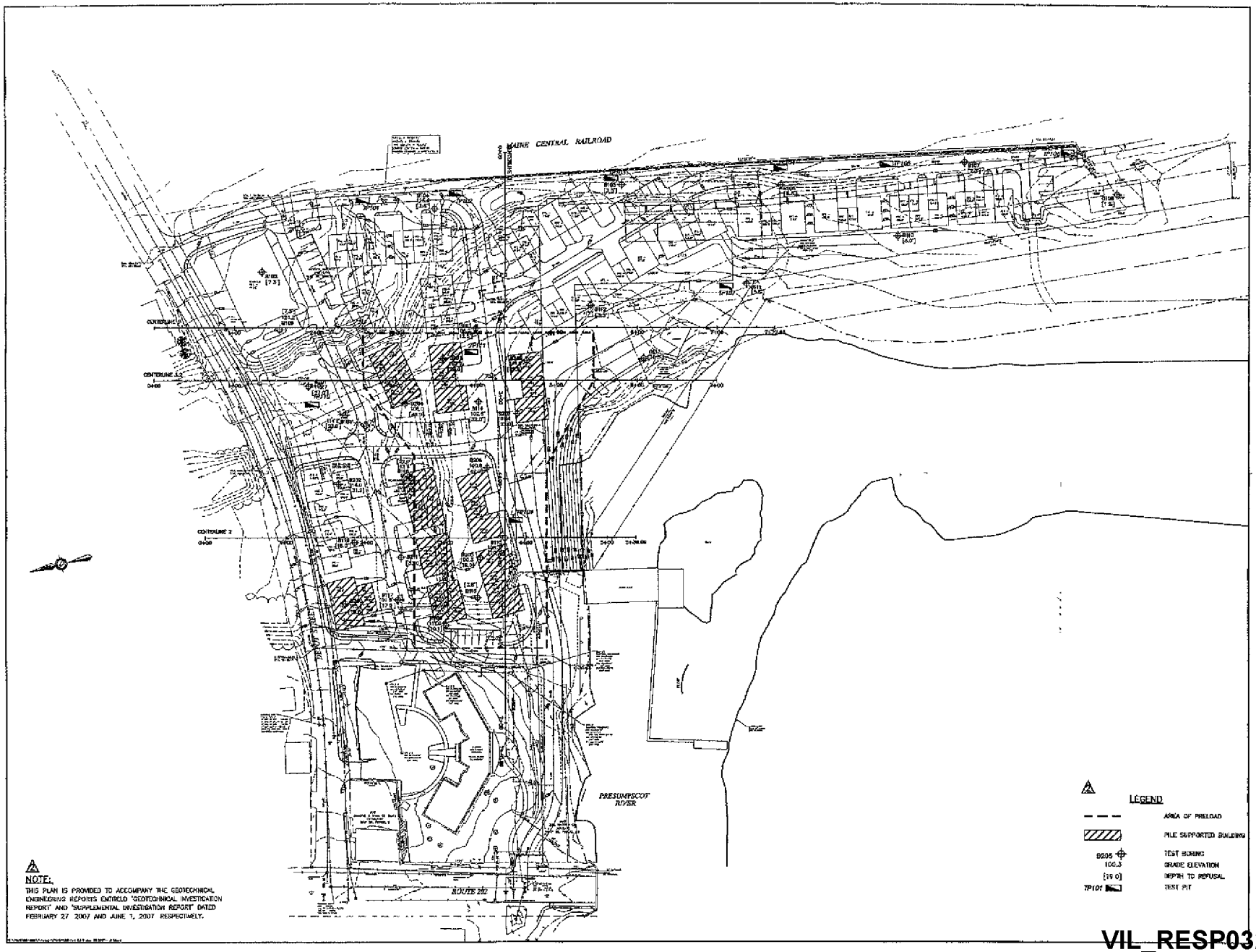
APPARENT SUBSURFACE PROFILES

No	Revision/Issue	Date
2	REVISED PER DEP	6/07
1	SUPPLEMENTAL INVESTIGATION	5/07

Design By:	Checked by:
DEZ	PDD
Drawn by:	Approved by:
DEG	PDD
Project:	Date:
364006	MAY 2007

Sheet: C2.1

VIL_RESP03255



NOTE:
THIS PLAN IS PROVIDED TO ACCOMPANY THE GEOTECHNICAL ENGINEERING REPORTS ENTITLED "GEOTECHNICAL INVESTIGATION REPORT" AND "SUPPLEMENTAL INVESTIGATION REPORT" DATED FEBRUARY 27, 2007 AND JUNE 1, 2007 RESPECTIVELY.

VILLAGE AT LITTLE FALLS
13 DEPOT STREET
SOUTH WINDHAM, MAINE

NORTHEAST CIVIL SOLUTIONS
153 US ROUTE 1
SCARBOROUGH, ME 04074

SCALE in FEET
1"=50'

OAK ENGINEERS
Brown's Wharf
Newburyport, MA 01950
Tel (978) 465-9977
Fax (978) 465-2988
www.oakengineers.com

PROPOSED PRELOAD AND PILING PLAN

No	Revision/Issue	Date
2	REVISED PER DEP	5/07
1	SUPPLEMENTAL INVESTIGATION	5/07

Design by: DEG | Drawn by: PDD
Check by: DEG | Approved by: PDD
Project: 064006 | Date: MAY 2007
Sheet: C3.0

VIL_RESP03256

ATTACHMENT B

Soil Boring Logs

Supplemental Geotechnical Investigation
Village at Little Falls, LLC
7 to 13 Depot Street
South Windham, Maine

OAK ENGINEERS

BORING LOG: B201

Ground Elevation:	See Plan	Total Depth:	27.0 Feet	Logged By:	PDD/DEG
GW encountered:	N.M. Feet	Boring Diameter:	4 Inches	Date Drilled:	4/24/07 to 4/24/07
GW @ completion:	N.M. Feet	Well Stickup:	0	Driller:	Northern Test Borings (Mike/

DEPTH	DESCRIPTION	REMARKS	SAMPLE	SAMPLE NUMBER	BLOW COUNTS (per 6 inches)	PENETRATION/ RECOVERY (in.)	USCS SYMBOL	N	WELL
	6" Topsoil Fine to coarse SAND and GRAVEL, trace silt	(moist) Grinding Cobbles and Boulders 2'-4'		SS1	3,2 7,19	24/13	SW-GW	9	
5	(firm) Brown fine to coarse SAND and SILT	(damp) @ 7.6' Auger Refusal (moved hole 5' to west)		SS2	4,5 10,4	24/14	SM-ML	15	
10	(firm) becomes little silt	(wet)		SS3	3,3 2,4	24/17	SM	5	
15	(loose) CLAY and SILT	(moist)		SS4	3,7 10,14	24/24	CL/ML	17	
20		(wet)		SS5	6,8 5,6	24/24	CL/ML	13	
25		(wet)		SS6	7, 50/5"	24/11	CL/ML	>50	
	(stiff) Spoon Refusal @ 25.9' bgs. Auger Refusal @ 27.0'								
30									
35									

NOTES:
1. Drilling Method: Automatic Hammer with 2-1/4" i.d. Hollow Stem Auger (HSA)
2. Soil Sampling: 2-inch Split Spoon Sampler driven with 140 lb. hammer falling 30 inches (Auto-Hammer).
3. N.M.= Not Measured, N.O.= Not Observed, N.T.= Not Tested,

CLIENT:
Northeast Civil Solutions

SITE:
Village at Little Falls
Depot Street
South Windham, Maine

VIL_RESP03258

Project No.: 064006 Page: 1

OAK ENGINEERS

BORING LOG: B202

Ground Elevation:	See Plan	Total Depth:	31.9' Feet	Logged By:	PDD/DEG
GW encountered:	N.M. Feet	Boring Diameter:	4 Inches	Date Drilled:	4/24/07 to 4/24/07
GW @ completion:	N.M Feet	Well Stickup:	0	Driller:	Northern Test Borings

DEPTH	DESCRIPTION	REMARKS	SAMPLE	SAMPLE NUMBER	BLOW COUNTS (per 6 inches)	PENETRATION/ RECOVERY (in.)	USCS SYMBOL	N	WELL
	Mottled, fine to medium SAND, some clay/silt, trace organic fibers	(damp)		SS1	2,1 2,3	24/7	SM	3	
5	(very loose) Mottled CLAY/SILT, little fine sand	(moist) Petroleum Odor		SS2	4,4 2,3	24/12	CL/ML	6	
10		(moist) Petroleum Odor		SS3	2,3 3,4	24/20	CL/ML	6	
15	(medium) Mottled CLAY	(moist) Petroleum Odor		SS4	7,8 10,12	24/24	CL/ML	18	
20		(moist) Petroleum Odor		SS5	8,10 10,12	24/11	CL/ML	20	
25		(wet) Petroleum Odor		SS6	4,5 5,4	24/24	CL/ML	10	
30	(stiff) Gray coarse GRAVEL, some fine to medium Sand, Silt/Clay (firm) Spoon Refusal @ 31.9' bgs.	(wet)		SS7	15,17 18, 50/4"	24/14	GM	35	
35									

NOTES:
1. Drilling Method: Automatic Hammer with 2-1/4" i.d. Hollow Stem Auger (HSA)
2. Soil Sampling: 2-inch Split Spoon Sampler driven with 140 lb. hammer falling 30 inches (Auto-Hammer).
3. N.M.= Not Measured, N.O.= Not Observed, N.T.= Not Tested,

CLIENT:
Northeast Civil Solutions

SITE:
Village at Little Falls
Depot Street
South Windham, Maine

VIL_RESP03259

Project No.: 064006 Page: 1

OAK ENGINEERS

BORING LOG: B203

Ground Elevation:	See Plan	Total Depth:	10.75 Feet	Logged By:	PDD/DEG
GW encountered:	N.M. Feet	Boring Diameter:	4 Inches	Date Drilled:	4/24/07 to 4/24/07
GW @ completion:	N.M. Feet	Well Stickup:	0	Driller:	Northern Test Borings

DEPTH	DESCRIPTION	REMARKS	SAMPLE	SAMPLE NUMBER	BLOW COUNTS (per 6 inches)	PENETRATION/ RECOVERY (in.)	USCS SYMBOL	N	WELL
	Brown fine to medium SAND,some Silt/Clay, trace coal, organic fiber	(moist)		SS1	2,2 2,2	24/15	SM	4	
5	becomes gray	(saturated)		SS2	1,1 1,1	24/8	SM	2	
10	becomes little wood (very loose to very dense) Spoon Refusal @ 10.8' bgs.	(wet) Petroleum Vapor		SS3	4, 50/3"	24/5	SM	>50	
15									
20									
25									
30									
35									

NOTES:
1. Drilling Method: Automatic Hammer with 2-1/4" i.d. Hollow Stem Auger (HSA)
2. Soil Sampling: 2-inch Split Spoon Sampler driven with 140 lb. hammer falling 30 inches (Auto-Hammer).
3. N.M.= Not Measured, N.O.= Not Observed, N.T.= Not Tested,

CLIENT:
Northeast Civil Solutions

SITE:
Village at Little Falls
Depot Street
South Windham, Maine

VIL_RESP03260

Project No.: 064006 Page: 1

OAK ENGINEERS

BORING LOG: B203

Ground Elevation:	See Plan	Total Depth:	10.75 Feet	Logged By:	PDD/DEG
GW encountered:	5.0 Feet	Boring Diameter:	4 Inches	Date Drilled:	4/24/07 to 4/24/07
GW @ completion:	N.M. Feet	Well Stickup:	0	Driller:	Northern Test Borings

DEPTH	DESCRIPTION	REMARKS	SAMPLE	SAMPLE NUMBER	BLOW COUNTS (per 6 inches)	PENETRATION/ RECOVERY (in.)	USCS SYMBOL	N	WELL
	Brown fine to medium SAND,some Silt/Clay, trace coal, organic fiber	(moist)		SS1	2,2 2,2	24/15	4	SM	
5	becomes gray	(saturated)		SS2	1,1 1,1	24/8	2	SM	
10	becomes little wood (very loose to very dense) Spoon Refusal @ 10.8' bgs.	(wet) Petroleum Vapor		SS3	4, 50/3"	24/5	>50	SM	
15									
20									
25									
30									
35									

NOTES:
1. Drilling Method: Automatic Hammer with 2-1/4" i.d. Hollow Stem Auger (HSA)
2. Soil Sampling: 2-inch Split Spoon Sampler driven with 140 lb. hammer falling 30 inches (Auto-Hammer).
3. N.M.= Not Measured, N.O.= Not Observed, N.T.= Not Tested,

CLIENT:
Northeast Civil Solutions

SITE:
Village at Little Falls
Depot Street
South Windham, Maine

VIL_RESP03261

Project No.: 064006

OAK ENGINEERS

BORING LOG: B204

Ground Elevation:	See Plan	Total Depth:	20.8 Feet	Logged By:	PDD/DEG
GW encountered:	N.M. Feet	Boring Diameter:	4 Inches	Date Drilled:	4/24/07 to 4/24/07
GW @ completion:	N.M Feet	Well Stickup:	0	Driller:	Northern Test Borings

DEPTH	DESCRIPTION	REMARKS	SAMPLE	SAMPLE NUMBER	BLOW COUNTS (per 6 inches)	PENETRATION/ RECOVERY (in.)	USCS SYMBOL	N	WELL
	Brown fine to medium SAND, little organic fibers, fine gravel	(moist)		SS1	4,5 9,10	24/4	SW	14	
5	becomes some fine to coarse gravel, little coal, trace silt/clay	(moist)		SS2	3,4 5,7	24/7	SW	9	
10	(firm) Brown fine SAND, little silt	(moist)		SS3	3,2 2,3	24/12	SM	4	
15	(loose) Fine to coarse GRAVEL and fine SAND/SILT	(moist)		SS4	1,1 3,5	24/1	SM-GM	4	
20	(loose) Gray CLAY	(saturated)		SS5	2,1 1,1	24/24	CL	2	
		(saturated)		SS6	2,2 2,2	24/24	CL	4	
25		(saturated)		SS7	2,2 2,2	24/24	CL	4	
		(saturated)		SS8	2,1 2,1	24/24	CL	3	
		(saturated)		SS9	1,1 2,1	24/24	CL	3	
30		(saturated)		SS10	1,2 2,2	24/24	CL	4	
		(saturated)		SS11	1,1 1,2	24/20	CL	2	
35		(saturated)		SS12	1,1 1,1	24/24	CL	2	
		(saturated)		SS13	1,2 1,1	24/24	CL	3	
	(very soft) Gray SILT/CLAY, little fine sand	(saturated)		SS14	1,2 2,1	24/24	CL	4	

NOTES:
1. Drilling Method: Automatic Hammer with 2-1/4" i.d. Hollow Stem Auger (HSA)
2. Soil Sampling: 2-inch Split Spoon Sampler driven with 140 lb. hammer falling 30 inches (Auto-Hammer).
3. N.M.= Not Measured, N.O.= Not Observed, N.T.= Not Tested,

CLIENT:
Northeast Civil Solutions

SITE:
Village at Little Falls
Depot Street
South Windham, Maine

VIL_RESP03262

Project No.: 064006 Page: 1

OAK ENGINEERS

BORING LOG: B204

Ground Elevation:	See Plan	Total Depth:	20.8 Feet	Logged By:	PDD/DEG
GW encountered:	N.M. Feet	Boring Diameter:	4 Inches	Date Drilled:	4/24/07 to 4/24/07
GW @ completion:	N.M Feet	Well Stickup:	0	Driller:	Northern Test Borings

DEPTH	DESCRIPTION	REMARKS	SAMPLE	SAMPLE NUMBER	BLOW COUNTS (per 6 inches)	PENETRATION/ RECOVERY (in.)	USCS SYMBOL	N	WELL
	(soft) Gray fine SAND, little silt (very dense) Spoon Refusal @ 40.9' bgs.	(wet)		SS15	7, 50/4"	24/8	SM	>50	
45									
50									
55									
60									
65									
70									
75									

NOTES:
1. Drilling Method: Automatic Hammer with 2-1/4" i.d. Hollow Stem Auger (HSA)
2. Soil Sampling: 2-inch Split Spoon Sampler driven with 140 lb. hammer falling 30 inches (Auto-Hammer).
3. N.M.= Not Measured, N.O.= Not Observed, N.T.= Not Tested,

CLIENT:
Northeast Civil Solutions

SITE:
Village at Little Falls
Depot Street
South Windham, Maine

VIL_RESP03263

Project No.: 064006 Page: 2

OAK ENGINEERS

BORING LOG: B205

Ground Elevation:	See Plan	Total Depth:	19.0 Feet	Logged By:	PDD/DEG
GW encountered:	N.M. Feet	Boring Diameter:	4 Inches	Date Drilled:	4/24/07 to 4/24/07
GW @ completion:	N.M. Feet	Well Stickup:	0	Driller:	Northern Test Borings

DEPTH	DESCRIPTION	REMARKS	SAMPLE	SAMPLE NUMBER	BLOW COUNTS (per 6 inches)	PENETRATION/ RECOVERY (in.)	USCS SYMBOL	N	WELL
	Gray fine to medium SAND, little gravel, brick, coal, trace orgainics	(damp)		SS1	7, 50/2"	24/5	SW	>50	
5	(very dense) becomes some fine to coarse gravel, little silt/clay, trace coal, brick	(moist)		SS2	2,4 4,5	24/6	SM	6	
10	(firm) Gray fine SAND and CLAY/SILT	(wet)		SS3	2,2 2,2	24/12	SM-CL/ML	4	
15	becomes little silt/clay	(moist)		SS4	7,18 32, 50/4"	24/14	SM-CL/ML	50	
	(very loose to very dense) Moderately fractured, very hard, sound, bedded sandstone and quartz.	Run #1: 16.9 - 21.9 FT. Recovery = 100% RQD = 70%							
20									
	Boring Terminated @ 21.9' bgs.								
25									
30									
35									

NOTES:
1. Drilling Method: Automatic Hammer with 2-1/4" i.d. Hollow Stem Auger (HSA)
2. Soil Sampling: 2-inch Split Spoon Sampler driven with 140 lb. hammer falling 30 inches (Auto-Hammer).
3 N.M.= Not Measured, N.O.= Not Observed, N.T.= Not Tested,

CLIENT: Northeast Civil Solutions

SITE: Village at Little Falls
Depot Street
South Windham, Maine

VIL_RESP03264

Project No.: 064006 Page: 1

OAK ENGINEERS

BORING LOG: B206

Ground Elevation:	See Plan	Total Depth:	10.1 Feet	Logged By:	PDD/DEG
GW encountered:	N.M. Feet	Boring Diameter:	4 Inches	Date Drilled:	4/24/07 to 4/24/07
GW @ completion:	N.M. Feet	Well Stickup:	0	Driller:	Northern Test Borings

DEPTH	DESCRIPTION	REMARKS	SAMPLE	SAMPLE NUMBER	BLOW COUNTS (per 6 inches)	PENETRATION/ RECOVERY (in.)	USCS SYMBOL	N	WELL
	Brown fine to medium SAND, little silt/clay, fine gravel, brick, organic fiber	(damp)		SS1	3,5 6,4	24/6	SM	11	
5		(moist)		SS2	2,4 4,5	24/4	SM	8	
10	(firm) BRICK and WOOD (very dense) Spoon Refusal @ 10.1' bgs.	(damp)		SS3	50/1"	24/2	-	>50	
15									
20									
25									
30									
35									

NOTES:
1. Drilling Method: Automatic Hammer with 2-1/4" i.d. Hollow Stem Auger (HSA)
2. Soil Sampling: 2-inch Split Spoon Sampler driven with 140 lb. hammer falling 30 inches (Auto-Hammer).
3. N.M.= Not Measured, N.O.= Not Observed, N.T.= Not Tested,

CLIENT:
Northeast Civil Solutions

SITE:
Village at Little Falls
Depot Street
South Windham, Maine

VIL_RESP03265

Project No.: 064006 Page: 1

OAK ENGINEERS

BORING LOG: B207

Ground Elevation:	See Plan	Total Depth:	20.6 Feet	Logged By:	PDD/DEG
GW encountered:	N.M. Feet	Boring Diameter:	4 Inches	Date Drilled:	4/24/07 to 4/24/07
GW @ completion:	N.M. Feet	Well Stickup:	0	Driller:	Northern Test Borings

DEPTH	DESCRIPTION	REMARKS	SAMPLE	SAMPLE NUMBER	BLOW COUNTS (per 6 inches)	PENETRATION/ RECOVERY (in.)	USCS SYMBOL	N	WELL
	Brown fine SAND and GRAVEL	(moist)		SS1	6,8 12,10	24/20	SP-GP	20	
5	(firm) becomes some SILT	(moist)		SS2	1,1 2,3	24/8	SM-GM	3	
10	(loose) Gray CLAY	(saturated)		SS3	2,1 5,4	24/24	CL	6	
15		(saturated)		SS4	2,1 1,2	24/24	CL	2	
		(saturated)		SS5	1,1 1,2 0/12"	24/24	CL	2	
20	(medium to very soft) Fine SAND, some Silt	(saturated)		SS6	23, 50/1"	24/24	SM	23	
	(firm) Spoon Refusal @ 20.6' bgs								
25									
30									
35									

NOTES:
1. Drilling Method: Automatic Hammer with 2-1/4" i.d. Hollow Stem Auger (HSA)
2. Soil Sampling: 2-inch Split Spoon Sampler driven with 140 lb. hammer falling 30 inches (Auto-Hammer).
3. N.M.= Not Measured, N.O.= Not Observed, N.T.= Not Tested,

CLIENT:
Northeast Civil Solutions

SITE:
Village at Little Falls
Depot Street
South Windham, Maine

VIL_RESP03266

Project No.: 064006 Page: 1

OAK ENGINEERS

BORING LOG: B208

Ground Elevation:	See Plan	Total Depth:	42.0 Feet	Logged By:	PDD/DEG
GW encountered:	N.M. Feet	Boring Diameter:	4 Inches	Date Drilled:	4/24/07 to 4/24/07
GW @ completion:	N.M. Feet	Well Stickup:	0	Driller:	Northern Test Borings

DEPTH	DESCRIPTION	REMARKS	SAMPLE	SAMPLE NUMBER	BLOW COUNTS (per 6 inches)	PENETRATION/ RECOVERY (in.)	USCS SYMBOL	N	WELL
	Brown fine to medium SAND, trace fine gravel, organic fibers, brick	(moist)		SS1	2,3 3,8	24/10	SW	6	
5	becomes little coal, brick, cement	(moist)		SS2	2,2 2,2	24/5	SW	4	
10	(loose) becomes little wood, clay/silt, trace fine gravel	(wet)		SS3	1,1 5,7	24/12	SM	6	
15	becomes gray, fine SAND, trace organic fibers	(wet)		SS4	2,2 3,3	24/15	SP	5	
	(loose) Gray CLAY	w=35%		T-1			CL		
20		(wet)		SS5	2,1 1,1	24/24	CL	2	
		(wet)		SS6	1,1 1,1	24/24	CL	2	
25		(wet)		SS7	1,1 1,1	24/24	CL	2	
		(wet)		SS8	1,1 1,1	24/24	CL	2	
		(wet)		SS9	1,1 1,1	24/24	CL	2	
30		(wet)		SS10	1,1 1,1	24/24	CL	2	
		(wet)		SS11	1,2 1,1	24/20	CL	3	
35		(wet)		SS12	1,1 2,1	24/24	CL	3	
	(soft/very soft) Gray fine SAND, some Clay/Silt	(moist)		SS13	2,2 3,4	24/24	SM	5	

NOTES:
1. Drilling Method: Automatic Hammer with 2-1/4" i.d. Hollow Stem Auger (HSA)
2. Soil Sampling: 2-inch Split Spoon Sampler driven with 140 lb. hammer falling 30 inches (Auto-Hammer).
3. N.M.= Not Measured, N.O.= Not Observed, N.T.= Not Tested,

CLIENT:
Northeast Civil Solutions

SITE:
Village at Little Falls
Depot Street
South Windham, Maine

VIL_RESP03267

Project No.: 064006 Page: 1

OAK ENGINEERS

BORING LOG: B208

Ground Elevation:	See Plan	Total Depth:	42.0 Feet	Logged By:	PDD/DEG
GW encountered:	N.M. Feet	Boring Diameter:	4 Inches	Date Drilled:	4/24/07 to 4/24/07
GW @ completion:	N.M. Feet	Well Stickup:	0	Driller:	Northern Test Borings

DEPTH	DESCRIPTION	REMARKS	SAMPLE	SAMPLE NUMBER	BLOW COUNTS (per 6 inches)	PENETRATION/ RECOVERY (in.)	USCS SYMBOL	N	WELL
	(loose) Gray fine to medium SAND	(wet)		SS15	7,7 10,12	24/8	SM	17	
	(firm) Boring Terminiated @ 42.0' bgs.								
45									
50									
55									
60									
65									
70									
75									

NOTES:
1. Drilling Method: Automatic Hammer with 2-1/4" i.d. Hollow Stem Auger (HSA)
2. Soil Sampling: 2-inch Split Spoon Sampler driven with 140 lb. hammer falling 30 inches (Auto-Hammer).
3. N.M.= Not Measured, N.O.= Not Observed, N.T.= Not Tested,

CLIENT:
Northeast Civil Solutions

SITE:
Village at Little Falls
Depot Street
South Windham, Maine

VIL_RESP03268

Project No.: 064006 Page: 2

OAK ENGINEERS

BORING LOG: B209

Ground Elevation:	See Plan	Total Depth:	26.9 Feet	Logged By:	PDD/DEG
GW encountered:	N.M. Feet	Boring Diameter:	4 Inches	Date Drilled:	4/24/07 to 4/24/07
GW @ completion:	N.M. Feet	Well Stickup:	0	Driller:	Northern Test Borings

DEPTH	DESCRIPTION	REMARKS	SAMPLE	SAMPLE NUMBER	BLOW COUNTS (per 6 inches)	PENETRATION/ RECOVERY (in.)	USCS SYMBOL	N	WELL
	Brown/black fine to medium SAND, little fine gravel, coal, trace brick	(moist)		SS1	17,15 7,5	24/24	SW	22	
5		(damp)		SS2	1,1 1,1	24/8	SW	2	
10	(firm to very loose) Gray fine to mediums SAND, some Silt/Clay, trace organic fiber	(wet)		SS3	1,1 1,3	24/10	SM	2	
15		(saturated)		SS4	4,4 5,7	24/12	SM	9	
20	(very loose to firm) Gray CLAY	(saturated)		SS5	2,1 1,1	24/20	CL	2	
		(saturated)		SS6	1,1 1,1	24/24	CL	2	
25		(saturated)		SS7	1,1 1,3	24/24	CL	2	
	becomes some fine Sand (very soft) Spoon Refusal @ 26.9' bgs.	(saturated)		SS8	7, 50/4"	24/10	CL	>50	
30									
35									

NOTES:
1. Drilling Method: Automatic Hammer with 2-1/4" i.d. Hollow Stem Auger (HSA)
2 Soil Sampling: 2-inch Split Spoon Sampler driven with 140 lb. hammer falling 30 inches (Auto-Hammer).
3. N.M.= Not Measured, N.O.= Not Observed, N.T.= Not Tested,

CLIENT:
Northeast Civil Solutions

SITE:
Village at Little Falls
Depot Street
South Windham, Maine

VIL_RESP03269

Project No.: 064006 Page: 1

OAK ENGINEERS

BORING LOG: B210

Ground Elevation:	See Plan	Total Depth:	25.0 Feet	Logged By:	PDD/DEG
GW encountered:	N.M. Feet	Boring Diameter:	4 Inches	Date Drilled:	4/24/07 to 4/24/07
GW @ completion:	N.M. Feet	Well Stickup:	0	Driller:	Northern Test Borings

DEPTH	DESCRIPTION	REMARKS	SAMPLE	SAMPLE NUMBER	BLOW COUNTS (per 6 inches)	PENETRATION/ RECOVERY (in.)	USCS SYMBOL	N	WELL
	Brown fine to medium SAND, little silt/clay, coal, trace organic fibers, brick	(damp)		SS1	2,5 2,2	24/18	SM	7	
5	becomes little fine gravel	(moist)		SS2	1,1 1,1	24/4	SM	2	
10	(loose to very loose) Brown fine to medium SAND and BRICK	(saturated) Petroleum Odor		SS3	1,1 2,2	24/4	SW	3	
15	(very loose) Gray CLAY	(saturated)		SS4	2,1 1,1	24/10	CL	2	
20		(saturated)		SS5	1,1 1,1	24/24	CL	2	
		(saturated)		SS6	1,1 1,1	24/24	CL	2	
		(saturated)		SS7	2,8 5,7	24/22	CL	13	
25	(very soft to stiff) Boring Terminated @ 25.0' bgs.								
30									
35									

NOTES:
1. Drilling Method: Automatic Hammer with 2-1/4" i.d. Hollow Stem Auger (HSA)
2. Soil Sampling: 2-inch Split Spoon Sampler driven with 140 lb. hammer falling 30 inches (Auto-Hammer).
3. N.M.= Not Measured, N.O.= Not Observed, N.T.= Not Tested,

CLIENT:
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SITE:
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Depot Street
South Windham, Maine

VIL_RESP03270

Project No.: 064006 Page: 1

OAK ENGINEERS

BORING LOG: B211

Ground Elevation:	See Plan	Total Depth:	33.0 Feet	Logged By:	PDD/DEG
GW encountered:	N.M. Feet	Boring Diameter:	4 Inches	Date Drilled:	4/24/07 to 4/24/07
GW @ completion:	N.M. Feet	Well Stickup:	0	Driller:	Northern Test Borings

DEPTH	DESCRIPTION	REMARKS	SAMPLE	SAMPLE NUMBER	BLOW COUNTS (per 6 inches)	PENETRATION/ RECOVERY (in.)	USCS SYMBOL	N	WELL
	Brown fine to coarse SAND, some fine to coarse gravel, trace brick, organic fibers	(damp)		SS1	7,12 3,6	24/8	SW	15	
5	(firm) Gray fine to medium SAND and CLAY/SILT, some Wood, Coal	(damp)		SS2	1,1 1,3	24/10	SM-CL/ML	2	
10		(damp)		SS3	12,5 14,17	24/15	SM-CL/ML	19	
15	(very loose to firm) Mottled CLAY	(moist)		SS4	14,16 18,21	24/4	CL	34	
20		(moist)		SS5	3,6 7,9	24/24	CL	13	
25	becomes gray	(wet)		SS6	2,1 2,2	24/24	CL	3	
		(wet)		SS7	1,2 2,1	24/24	CL	4	
30		(wet)		SS8	1,2 2,2	24/24	CL	4	
	(hard to soft) Tan fine SAND, little Silt/Clay	(saturated)		SS9	7,10 12,15	24/24	SM	22	
	(firm) Boring Terminated @ 33.0' bgs.								
35									

NOTES:
1. Drilling Method: Automatic Hammer with 2-1/4" i.d. Hollow Stem Auger (HSA)
2. Soil Sampling: 2-inch Split Spoon Sampler driven with 140 lb. hammer falling 30 inches (Auto-Hammer).
3. N.M.= Not Measured, N.O.= Not Observed, N.T.= Not Tested,

CLIENT:
Northeast Civil Solutions

SITE:
Village at Little Falls
Depot Street
South Windham, Maine

VIL_RESP03271

Project No.: 064006 Page: 1

OAK

ENGINEERS

Civil Engineers & Land Surveyors

Soil & Rock Classification Guidelines

Grain Size		
Material	*Fraction*	*Sieve Size*
Boulders		12" +
Cobbles		3" - 12"
Gravel	coarse	3/4" - 3"
	fine	No. 4 to 3/4"
Sand	coarse	No. 10 to No. 4
	medium	No. 40 to No. 10
	fine	No. 200 to No. 40
Fines (Silt & Clay)		Passing No. 200

Identification of soil type is made on basis of an estimate of particle sizes, and in the case of fine grained soils also on basis of plasticity.

Classification - Rock Terms			
Term		Meaning	
Hardness	Soft	Scratched by fingernail	
	Medium Hard	Scratched easily by penknife	
	Hard	Scratched with difficulty by penknife	
	Very Hard	Cannot be scratched by penknife	
Weathering	Very Weathered Weathered Sound	Judged from relative amounts of disintegration, iron staining, core recovery, clay seams, etc.	
Bedding	Laminated	(< 1")	Natural Break in Rock Layers
	Thin Bedded	(1" - 4")	
	Bedded	(4" - 12")	
	Thick Bedded	(12" - 36")	
	Massive	(> 36")	

Coarse and Fine Grained Soils	
Descriptive Adjective	**Percentage Requirement*
Trace	1-10%
Little	10-20%
Some	20-35%
And	35-50%

When sampling gravelly soils with a standard split spoon, the true percentage of gravel is often not recovered due to the relatively small sampler diameter.
*Percentage measured by weight.

Rock Weathering Classification		
Grade	*Symbol*	*Diagnostic Features*
Fresh	F	No visible sign of decomposition or discoloration. Rings under hammer impact.
Slightly Weathered	WS	Slight discoloration inwards from open fracture, otherwise similar to F.
Moderately Weathered	WM	Discoloration throughout. Weaker mineral such as feldspar decomposed. Strength somewhat less than fresh rock but cores can not be broken by hand or scraped by knife.
Highly Weathered	WH	Most minerals somewhat decomposed. Specimens can be broken by hand with effort or shaved with knife. Core stones present in rock mass. Texture becoming distinct but fabric.
Completely Weathered	WC	Minerals decomposed to soil but fabric and structure preserved (Saprolite). Specimens easily crumbled or penetrated.
Residual Soil	RS	Advanced state of decomposition resulting in Plastic soils. Rock fabric and structure completely destroyed. Large volume change.

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VIL_RESP03272

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Unified System Classification of Soils (ASTM D-2487)

Major Divisions			*Group Symbols*	*Typical Names*
Coarse-Grained Soils More than 50% retained on No. 200 Sieve	Gravels 50% or more of coarse fraction retained on No.4 sieve.	Clean Gravels	GW	Well-graded gravels and gravel-sand mixtures, little or no fines.
			GP	Poorly graded gravels and gravel-sand mixtures, little or no fines.
		Gravels w/ Fines	GM	Silty gravels, gravel-sand-silt mixtures.
			GC	Clayey gravels, gravel-sand-clay mixtures.
	Sands more than 50% coarse fraction passes No. 4 sieve.	Clean Sands	SW	Well-graded sands and gravelly sands little or no fines.
			SP	Poorly graded sands and gravelly sands little or no fines.
		Sands w/ Fines	SM	Silty gravels, gravel-sand-silt mixtures.
			SC	Clayey sands, sand-clay mixtures.
Fine-Grained Soils 50% or more passes No. 200 Sieve	Silts and Clays Liquid Limit 50% or less.		ML	Inorganic silts, very fine sands, rock flour, silty or clayey sands.
			CL	Inorganic clays of low plasticity, gravelly clays, sandy clays, silty clays.
			OL	Organic silts and organic silty clays of low plasticity.
	Silts and Clays Liquid Limit greater than 50%.		MH	Inroganic silts, micaceous or diatomaceous fine sands or silts, elastic silts
			CH	Inorganic clays of high plasticity, fat clays.
			OH	Organic clays of medium to high plasticity.
Highly Organic Soils			Pt	Peat, much and other highly organic soils

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VIL_RESP03273

ATTACHMENT C

Laboratory Analysis

Supplemental Geotechnical Investigation
Village at Little Falls, LLC
7 to 13 Depot Street
South Windham, Maine

GeoTesting express
a subsidiary of Geocomp Corporation

Client:	Oak Engineers		
Project Name:	So. Windham		
Project Location:	---		
GTX #:	7434	Tested By:	md
Test Date:	05/02/07	Checked By:	jdt

TUBE LOG using Density of Soil In Place by the Drive Cylinder Method by ASTM D 2937 and Moisture Content by ASTM D 2216

Boring ID	Sample ID	Depth, ft	Section	Visual Description	Bulk Density, lb/ft^3	Moisture Content, %	Dry Density, lb/ft^3
~~B-105~~	---	17-19	Top	Wet, gray clayey silt, very soft	109	32	82.8
~~B-105~~	---	17-19	Middle	Wet, gray clayey silt, very soft	121	35	89.7
~~B-105~~	---	17-19	Bottom	Wet, gray clayey silt, very soft	111	38	79.9

Notes: Density determined on undisturbed tube sample provided to GeoTesting Express in a Shelby tube
Moisture content determined by ASTM D 2216 at 110° C

* B208
DEG

VIL_RESP03275

GeoTesting express
a subsidiary of Geocomp Corporation

Client:	Oak Engineers
Project Name:	So. Windham
Project Location:	---
GTX #:	7434
Date:	05/11/07
Tested by:	md
Checked by:	jdt

Laboratory Vane Shear by ASTM D 4648

Boring ID	Sample ID	Depth, ft	Visual Description	Vane Shear Strength, kN/m²			Vane Shear Strength, tsf		
				Top	Middle	Bottom	Top	Middle	Bottom
~~B-105~~ ★	---	17-19	Wet, gray clayey silt, very soft	---	1.7	2.5	---	0.02	0.03
				---	1.7	2.0	---	0.02	0.02
				---	1.8	1.5	---	0.02	0.02
			Average	---	1.7	2.0	---	0.02	0.02

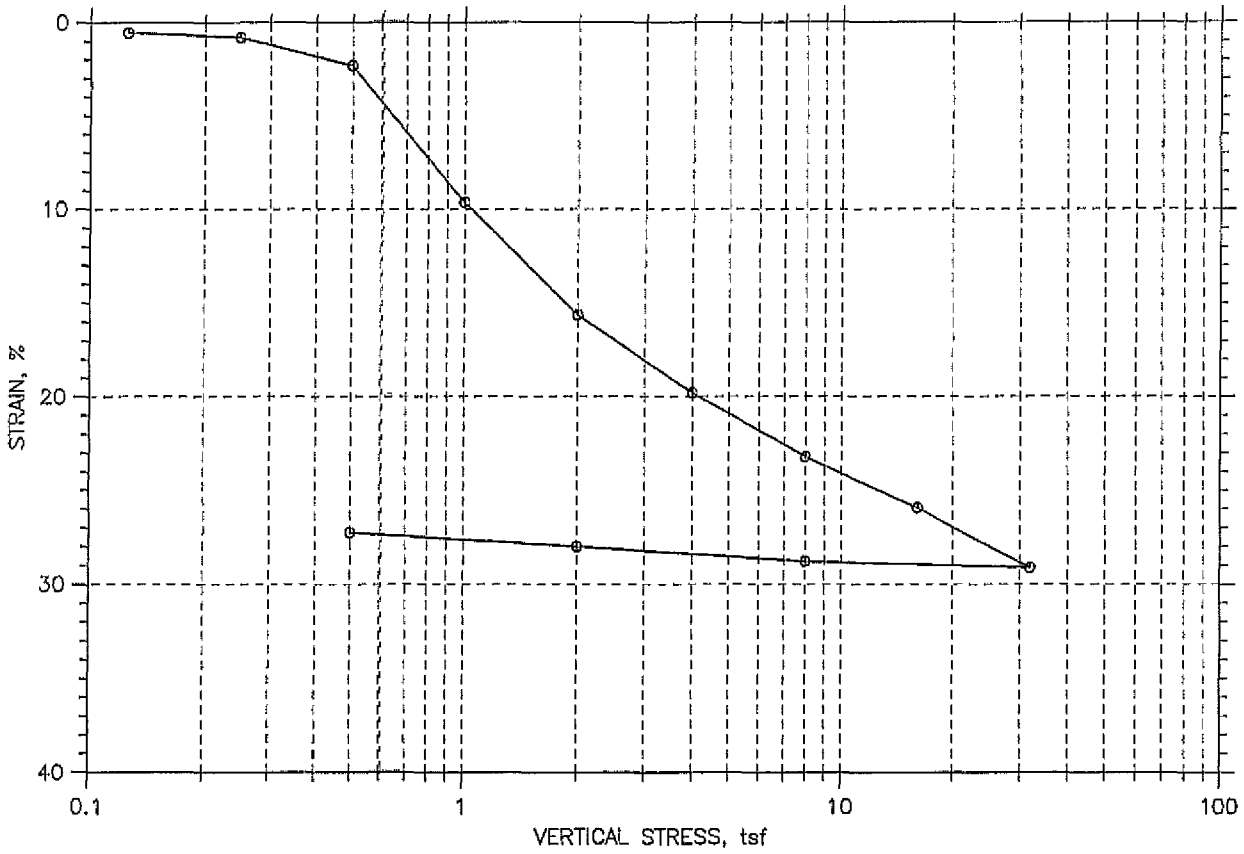
Notes: As requested, two tests were performed on this tube sample. The middle and bottom sections of the tube were tested.

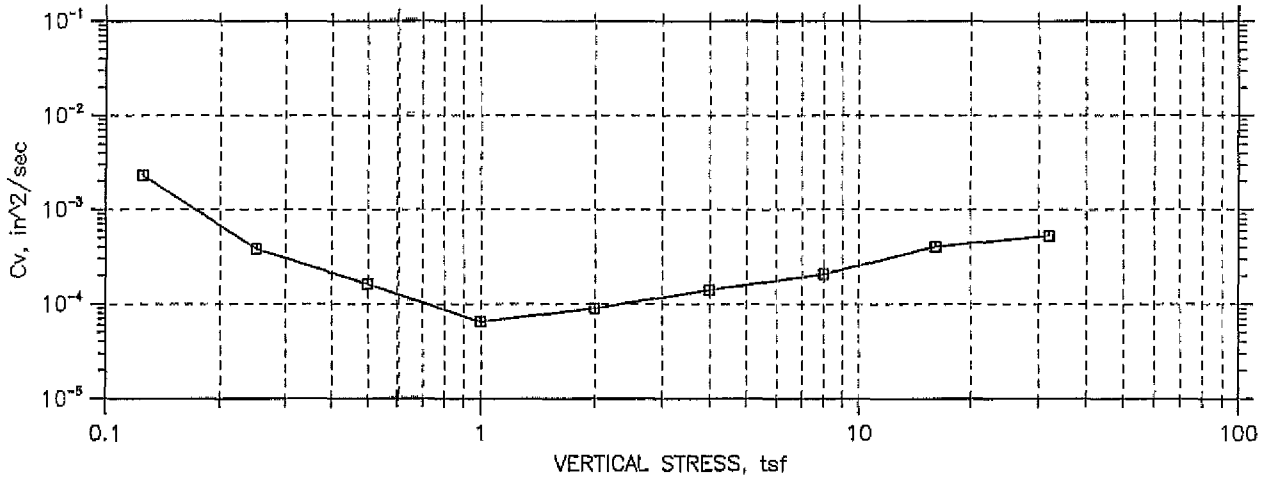
★ B208
DEG

VIL_RESP03276

CONSOLIDATION TEST DATA

SUMMARY REPORT





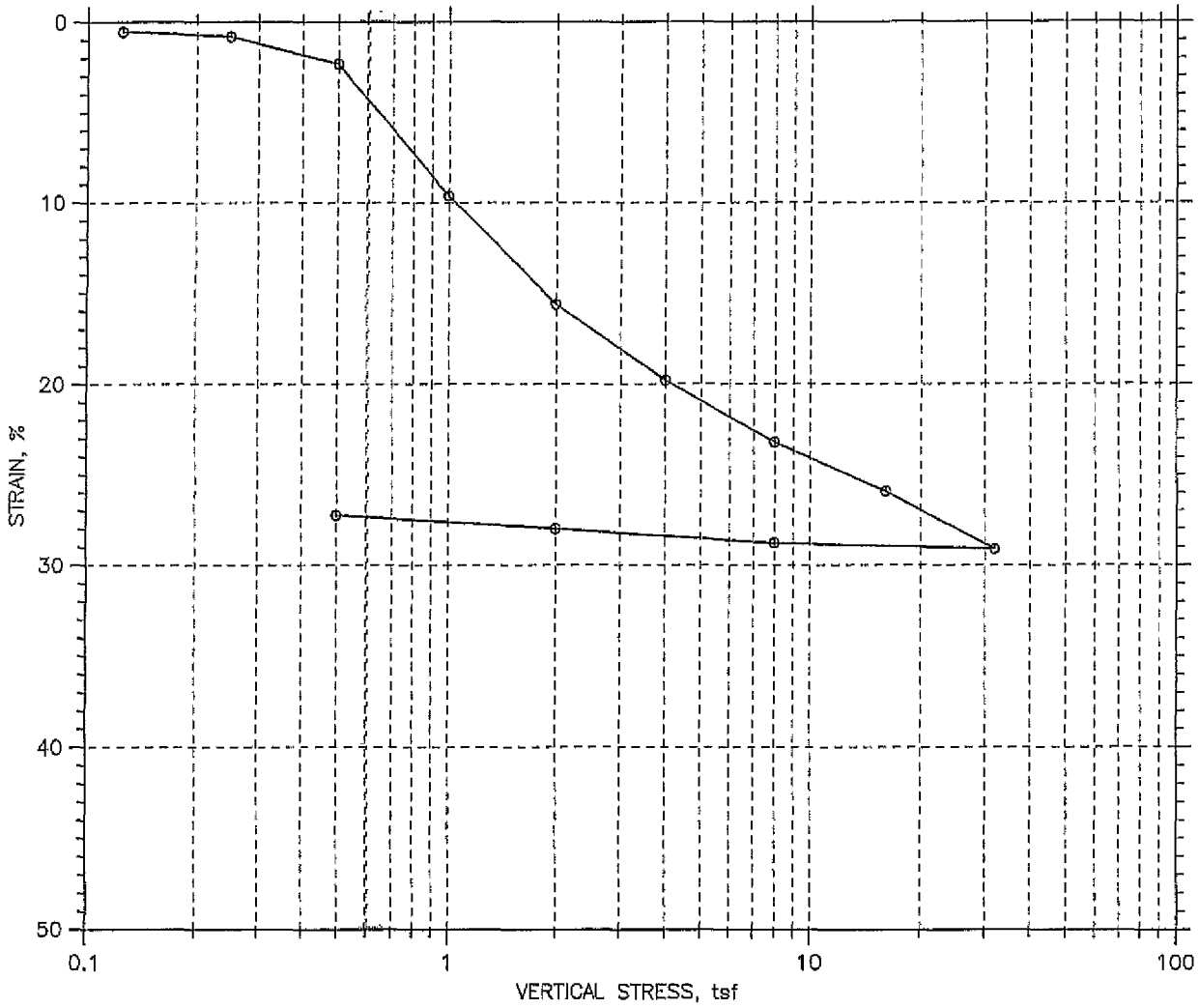
GeoTesting express a subsidiary of Geocomp Corporation	Project: So. Windham	Location: ---	Project No.: GTX-7434
	Boring No.: ~~B-105~~ ★	Tested By: md	Checked By: jdt
	Sample No.: ---	Test Date: 05/02/07	Depth: 17-19 ft
	Test No.: C-1	Sample Type: Tube	Elevation: ---
	Description: Wet, gray clayey silt, very soft		
	Remarks: System C		

Fri, 11-MAY-2007 12:22:16 ★ B208 DEG

VIL_RESP03277

CONSOLIDATION TEST DATA

SUMMARY REPORT



					Before Test	After Test
Overburden Pressure: ---				Water Content, %	45.39	23.27
Preconsolidation Pressure: ---				Dry Unit Weight, pcf	75.21	103.4
Compression Index: ---				Saturation, %	98.93	100.00
Diameter: 2.5 in		Height: 1 in		Void Ratio	1.24	0.63
LL: ---	PL: ---	PI: ---	GS: 2.69			

GeoTesting express a subsidiary of Geocomp Corporation	Project: So. Windham	Location: ---	Project No.: GTX-7434
	Boring No.: ~~B-105~~ ★	Tested By: md	Checked By: jdt
	Sample No.: ---	Test Date: 05/02/07	Depth: 17-19 ft
	Test No.: C-1	Sample Type: Tube	Elevation: ---
	Description: Wet, gray clayey silt, very soft		
	Remarks: System C		

Fri, 11-MAY-2007 12:22:16 ★ B208 DEG

VIL_RESP03278

CONSOLIDATION TEST DATA

Project: So. Windham
Boring No.: ~~B-105~~ ★
Sample No.: ---
Test No.: C-1

Location: ---
Tested By: md
Test Date: 05/02/07
Sample Type: Tube

Project No.: GTX-7434
Checked By: jdt
Depth: 17-19 ft
Elevation: ---

Soil Description: Wet, gray clayey silt, very soft
Remarks: System C

Estimated Specific Gravity: 2.69
Initial Void Ratio: 1.24
Final Void Ratio: 0.63

Liquid Limit: ---
Plastic Limit: ---
Plasticity Index: ---

Initial Height: 1.00 in
Specimen Diameter: 2.50 in

	Before Consolidation		After Consolidation	
	Trimmings	Specimen+Ring	Specimen+Ring	Trimmings
Container ID	2163	RING		
Wt. Container + Wet Soil, gm	392.6	348.46	327.02	126.73
Wt. Container + Dry Soil, gm	275.45	304.47	304.47	104.33
Wt. Container, gm	8.25	207.57	207.57	8.05
Wt. Dry Soil, gm	267.2	96.905	96.905	96.28
Water Content, %	43.84	45.39	23.27	23.27
Void Ratio	---	1.24	0.63	---
Degree of Saturation, %	---	98.93	100.00	---
Dry Unit Weight, pcf	---	75.206	103.37	---

Note: Specific Gravity and Void Ratios are calculated assuming the degree of saturation equals 100% at the end of the test. Therefore, values may not represent actual values for the specimen.

★ B208 DG

VIL_RESP03279

CONSOLIDATION TEST DATA

Project: So. Windham
Boring No.: ~~B-105~~ ★
Sample No.: ---
Test No.: C-1

Location: ---
Tested By: md
Test Date: 05/02/07
Sample Type: Tube

Project No.: GTX-7434
Checked By: jdt
Depth: 17-19 ft
Elevation: ---

Soil Description: Wet, gray clayey silt, very soft
Remarks: System C

	Applied Stress tsf	Final Displacement in	Void Ratio	Strain at End %	T50 Fitting Sq.Rt. min	T50 Fitting Log min	Coefficient of Consolidation Sq.Rt. in^2/sec	Coefficient of Consolidation Log in^2/sec	Coefficient of Consolidation Ave. in^2/sec
1	0.125	0.005253	1.224	0.53	0.4	0.0	2.32e-003	0.00e+000	2.32e-003
2	0.25	0.00791	1.218	0.79	2.1	0.0	3.85e-004	0.00e+000	3.85e-004
3	0.5	0.02304	1.184	2.30	5.1	4.6	1.55e-004	1.73e-004	1.64e-004
4	1	0.09617	1.021	9.62	10.5	11.8	6.91e-005	6.18e-005	6.52e-005
5	2	0.156	0.887	15.60	7.0	6.9	8.99e-005	9.11e-005	9.05e-005
6	4	0.1978	0.794	19.78	3.7	4.2	1.50e-004	1.34e-004	1.41e-004
7	8	0.232	0.717	23.20	2.1	2.8	2.42e-004	1.81e-004	2.07e-004
8	16	0.2593	0.656	25.93	1.0	1.3	4.78e-004	3.51e-004	4.05e-004
9	32	0.2911	0.585	29.11	0.7	0.9	6.13e-004	4.64e-004	5.28e-004
10	8	0.2878	0.592	28.78	0.0	0.0	4.81e-002	0.00e+000	4.81e-002
11	2	0.2799	0.610	27.99	0.8	0.0	5.59e-004	0.00e+000	5.59e-004
12	0.5	0.2725	0.627	27.25	2.8	3.3	1.53e-004	1.29e-004	1.40e-004

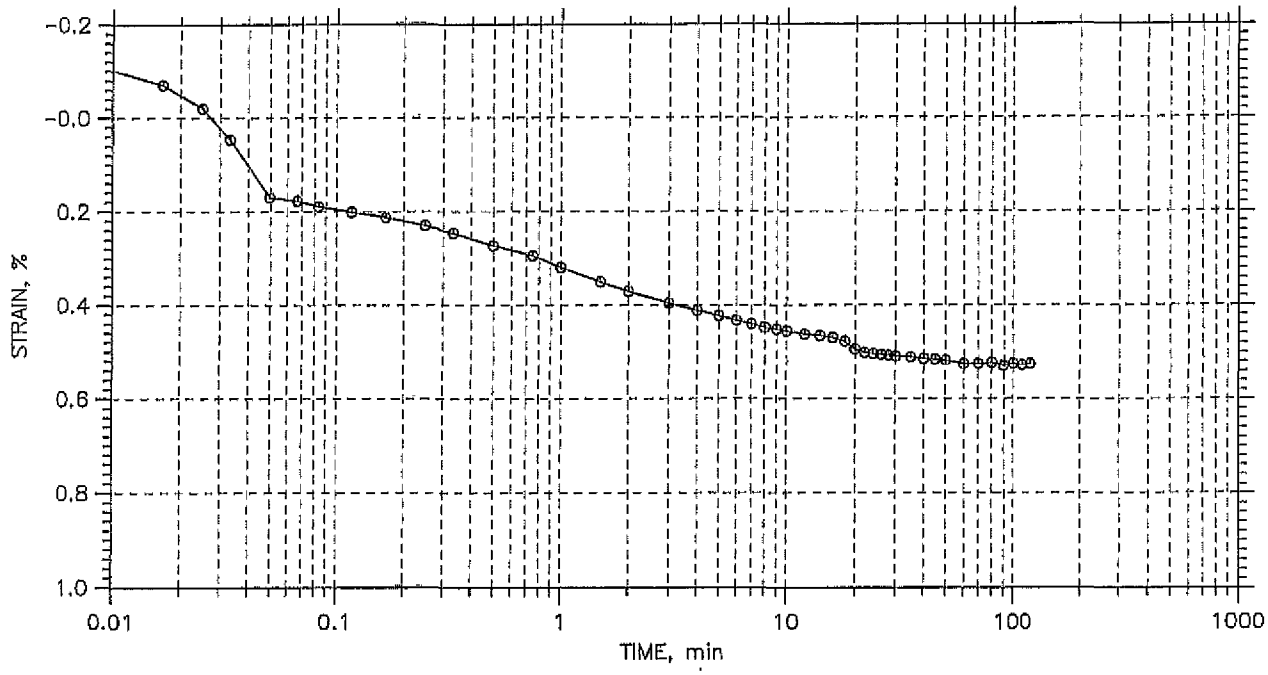
★ B208
DEG

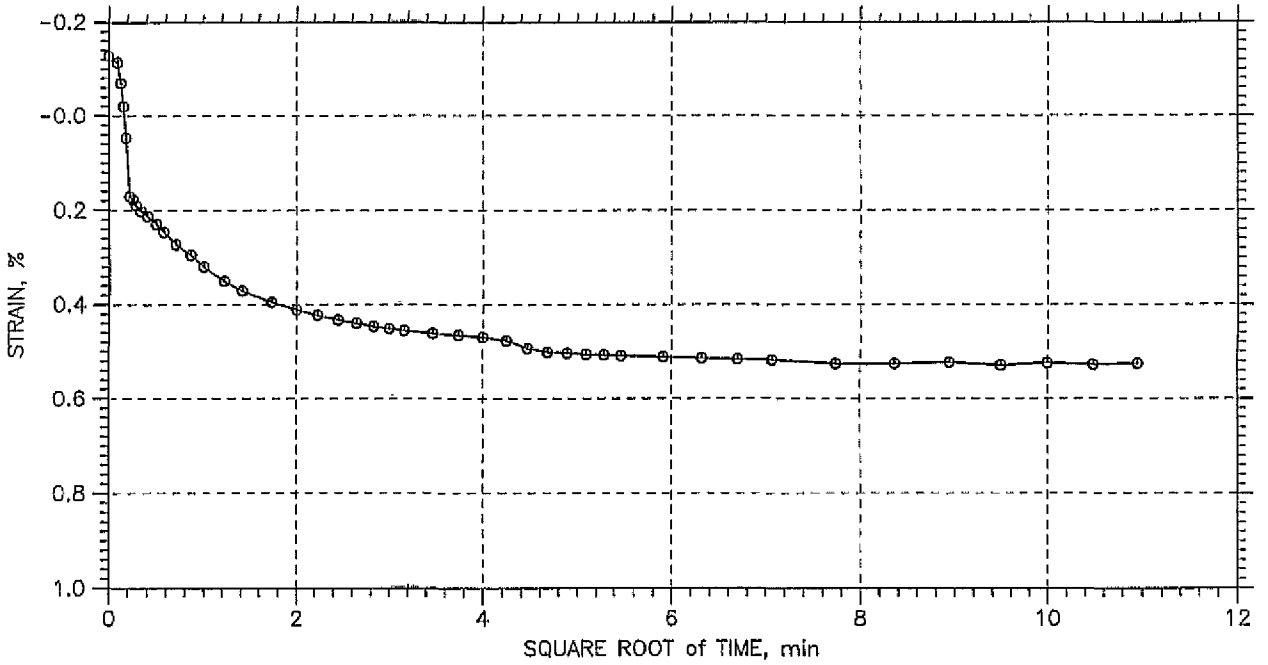
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 1 of 12

Stress: 0.125 tsf





GeoTesting express a subsidiary of Geocomp Corporation	Project: So. Windham	Location: ---	Project No.: GTX-7434
	Boring No.: ~~B-105~~ ★	Tested By: md	Checked By: jdt
	Sample No.: ---	Test Date: 05/02/07	Depth: 17-19 ft
	Test No.: C-1	Sample Type: Tube	Elevation: ---
	Description: Wet, gray clayey silt, very soft		
	Remarks: System C		

Fri, 11-MAY-2007 12:22:16 ★ B208 DEG

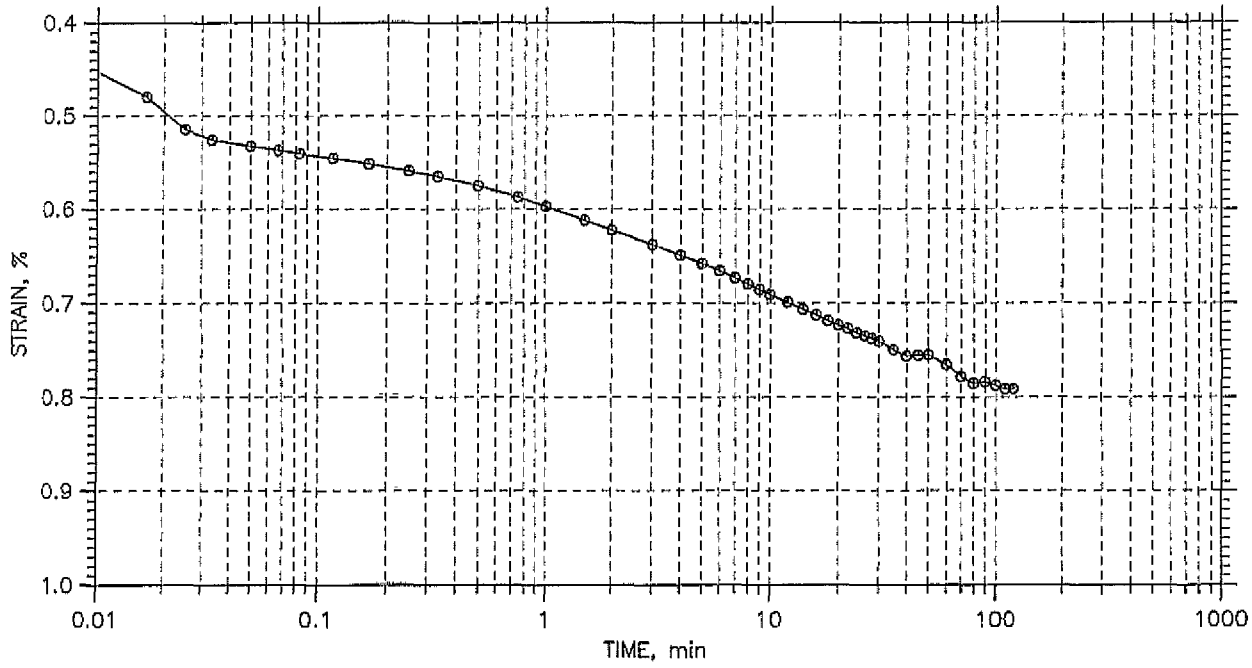
VIL_RESP03281

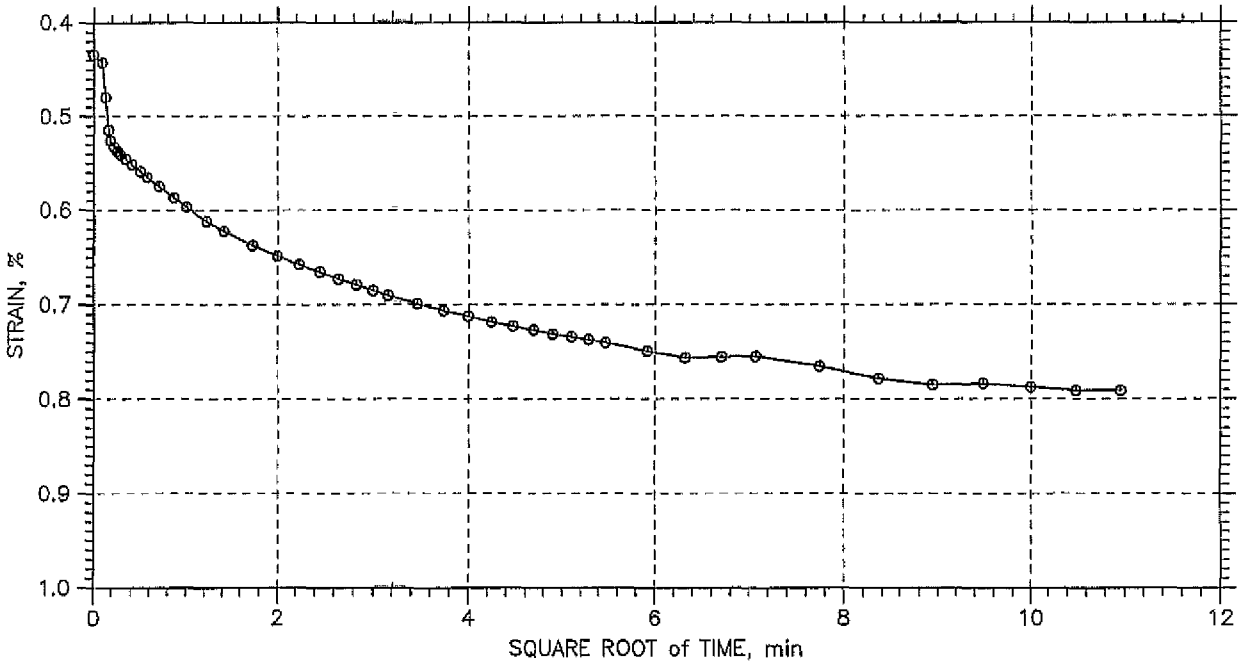
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 2 of 12

Stress: 0.25 tsf





GeoTesting express a subsidiary of Geocomp Corporation	Project: So. Windham	Location: ---	Project No.: GTX-7434
	Boring No.: ~~B-105~~ ★	Tested By: md	Checked By: jdt
	Sample No.: ---	Test Date: 05/02/07	Depth: 17-19 ft
	Test No.: C-1	Sample Type: Tube	Elevation: ---
	Description: Wet, gray clayey silt, very soft		
	Remarks: System C		

Fri, 11-MAY-2007 12:22:16 ★ B208 DEG

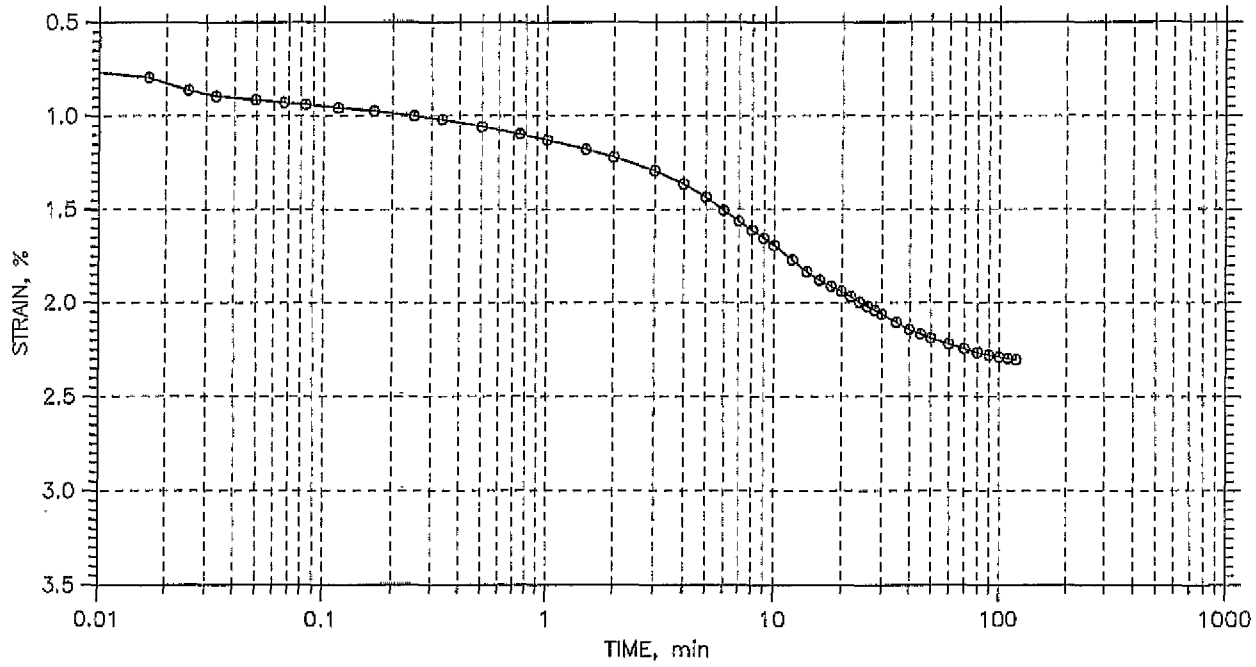
VIL_RESP03282

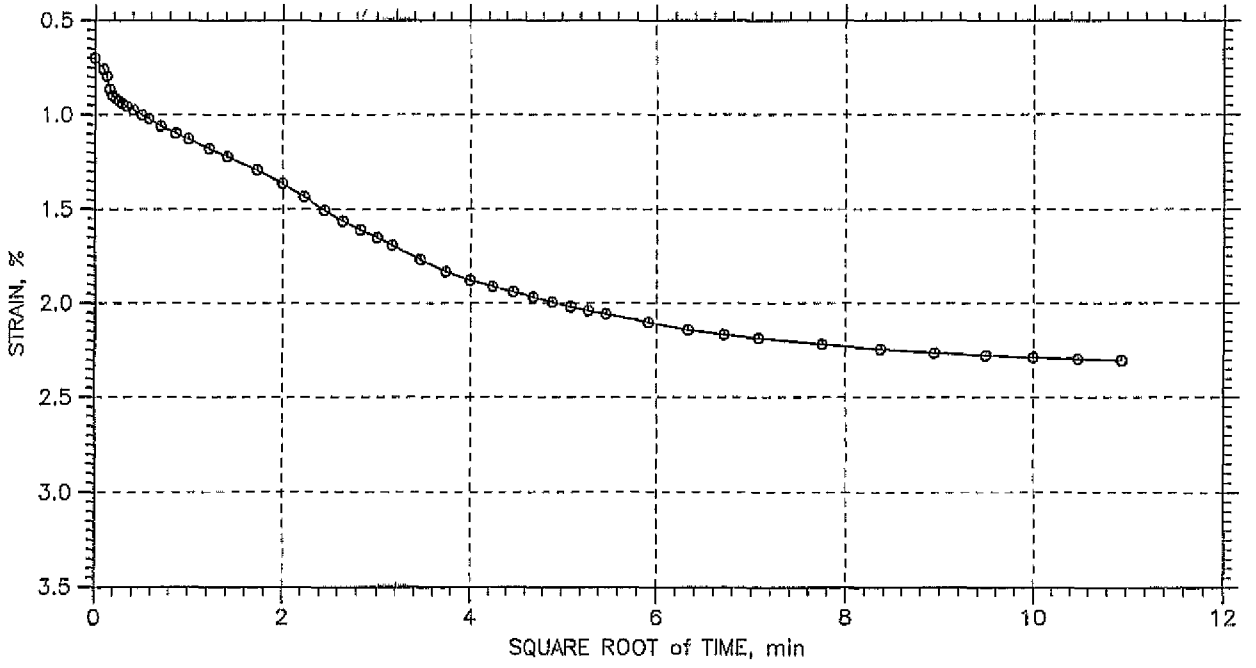
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 3 of 12

Stress: 0.5 tsf





GeoTesting express a subsidiary of Geocomp Corporation	Project: So. Windham	Location: ---	Project No.: GTX-7434
	Boring No.: ~~B-105~~ ★	Tested By: md	Checked By: jdt
	Sample No.: ---	Test Date: 05/02/07	Depth: 17-19 ft
	Test No.: C-1	Sample Type: Tube	Elevation: ---
	Description: Wet, gray clayey silt, very soft		
	Remarks: System C		

Fri, 11-MAY-2007 12:22:16 ★ B208 DEG

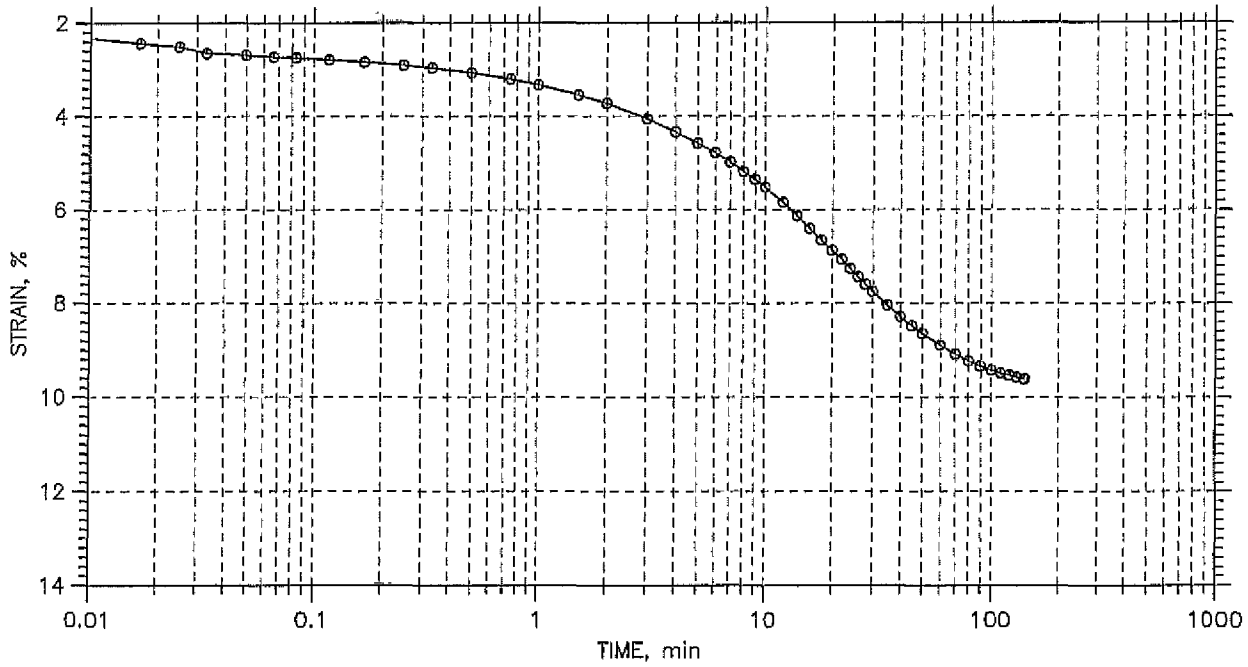
VIL_RESP03283

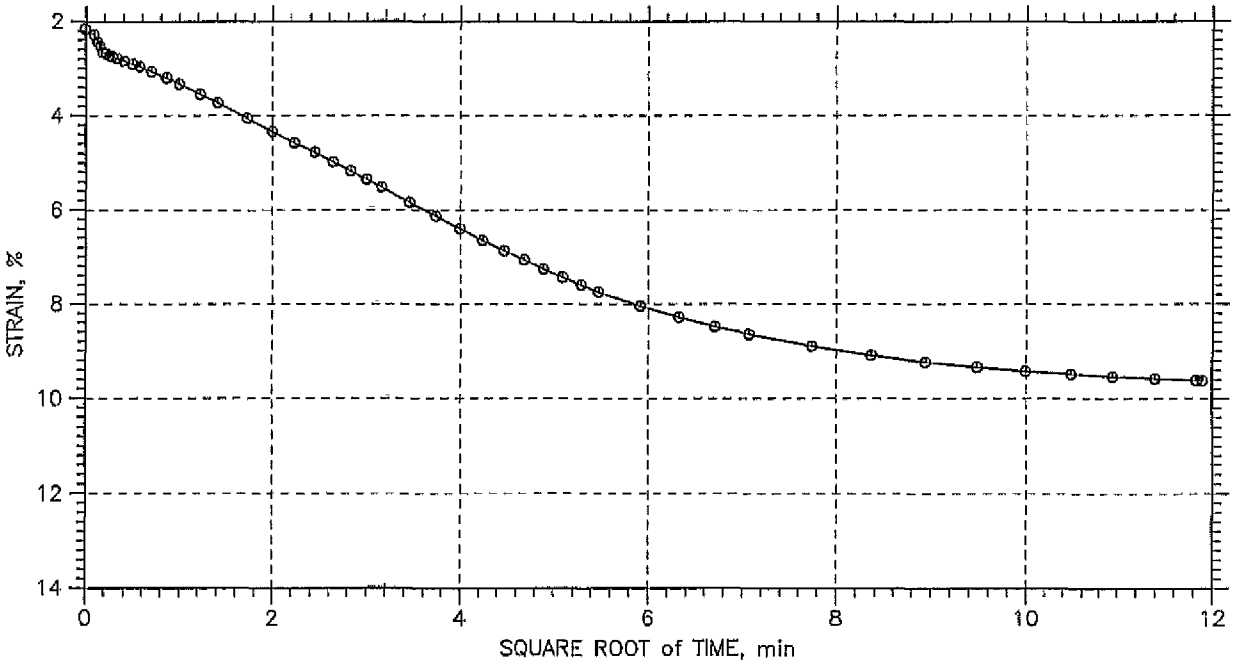
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 4 of 12

Stress: 1. tsf





GeoTesting express a subsidiary of Geocomp Corporation	Project: So. Windham	Location: ---	Project No.: GTX-7434
	Boring No.: ~~B-105~~ ★	Tested By: md	Checked By: jdt
	Sample No.: ---	Test Date: 05/02/07	Depth: 17-19 ft
	Test No.: C-1	Sample Type: Tube	Elevation: ---
	Description: Wet, gray clayey silt, very soft		
	Remarks: System C		

Fri, 11-MAY-2007 12:22:16 ★B208 DEC

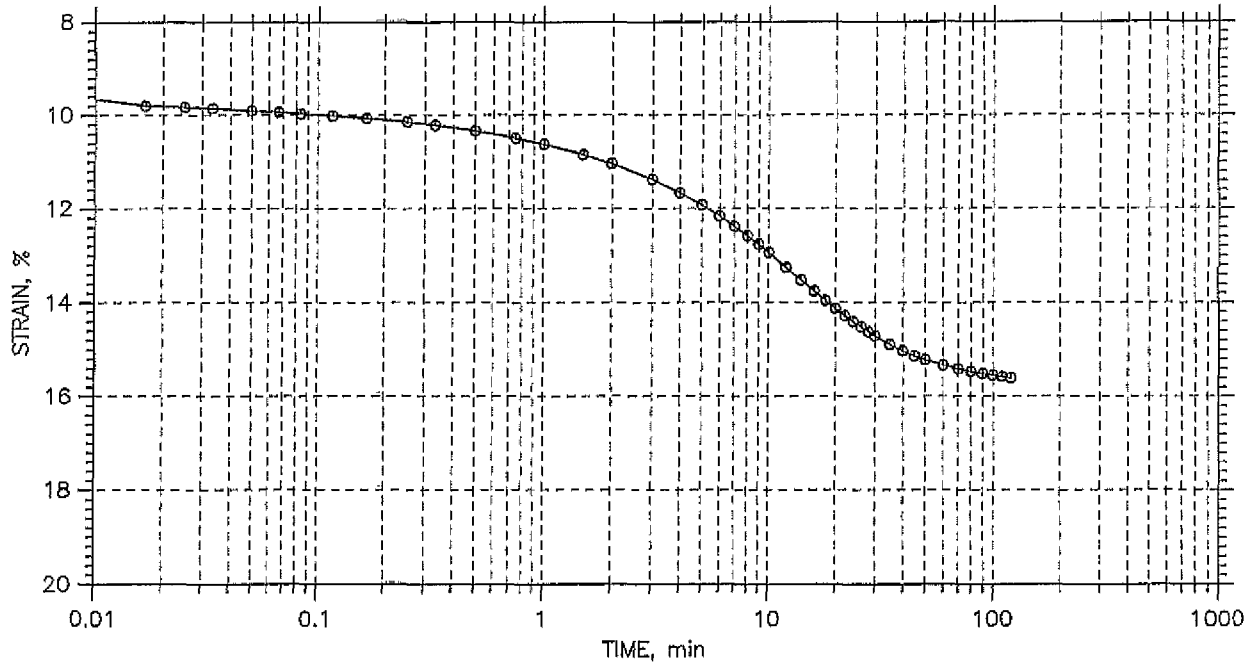
VIL_RESP03284

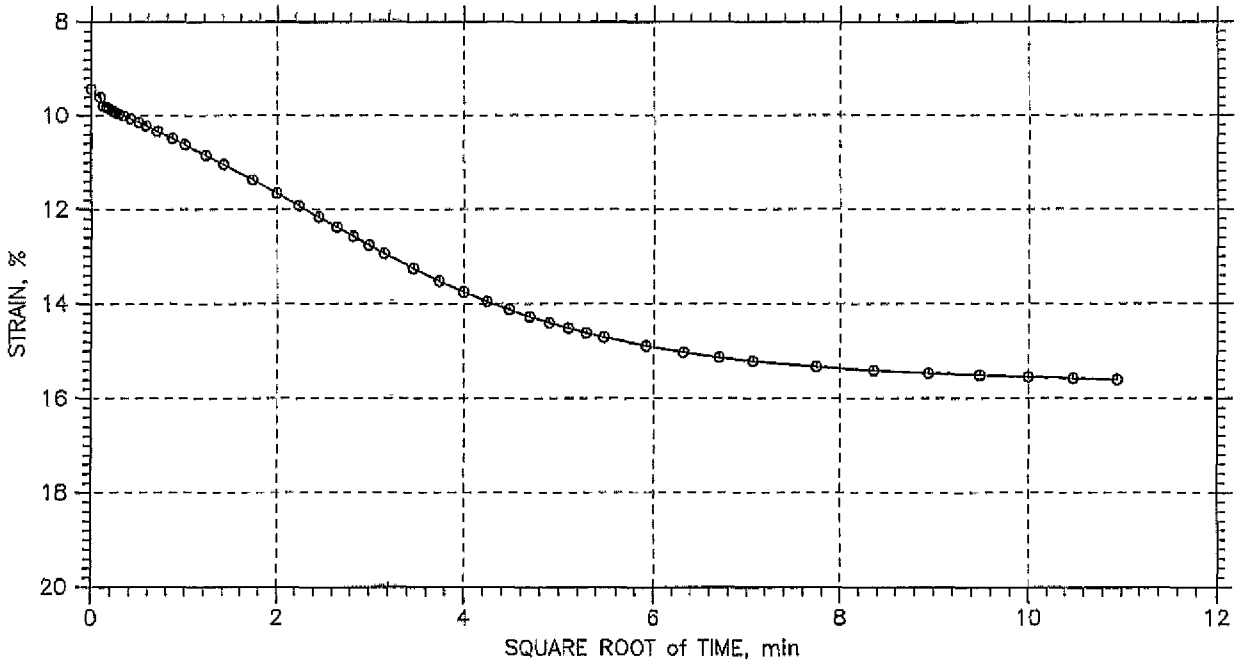
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 5 of 12

Stress: 2. tsf





GeoTesting express a subsidiary of Geocomp Corporation	Project: So. Windham	Location: ---	Project No.: GTX-7434
	Boring No.: ~~B-105~~ ★	Tested By: md	Checked By: jdt
	Sample No.: ---	Test Date: 05/02/07	Depth: 17-19 ft
	Test No.: C-1	Sample Type: Tube	Elevation: ---
	Description: Wet, grdy clayey silt, very soft		
	Remarks: System C		

Fri, 11-MAY-2007 12:22:16

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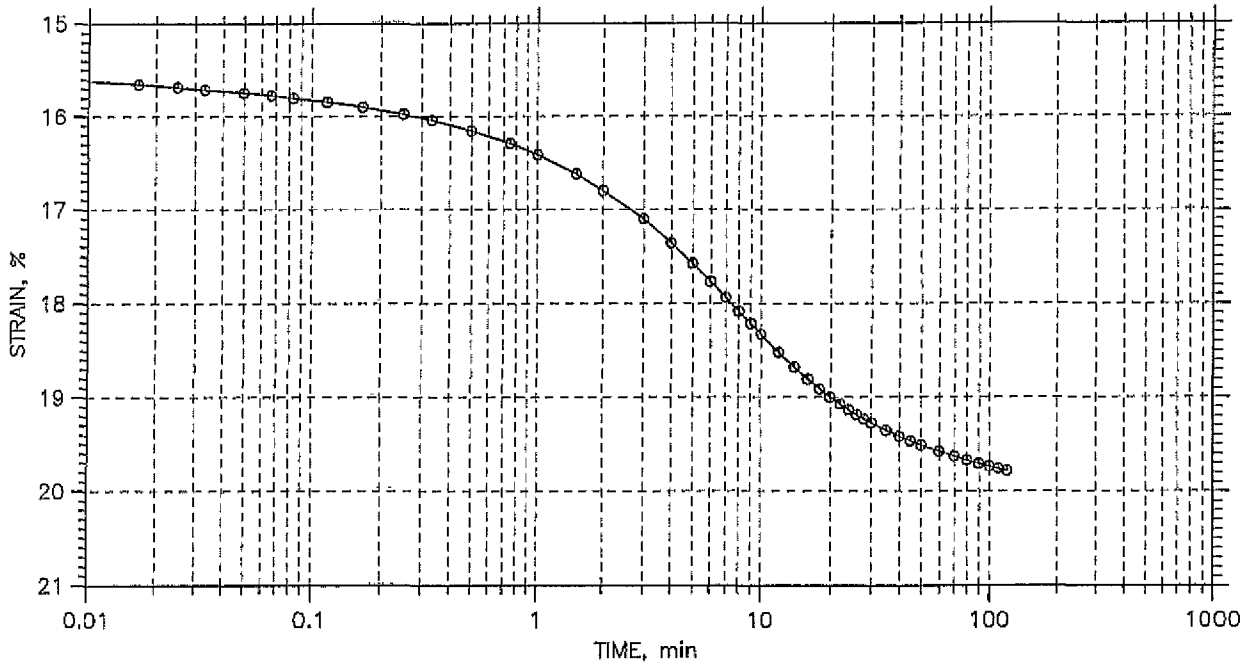
VIL_RESP03285

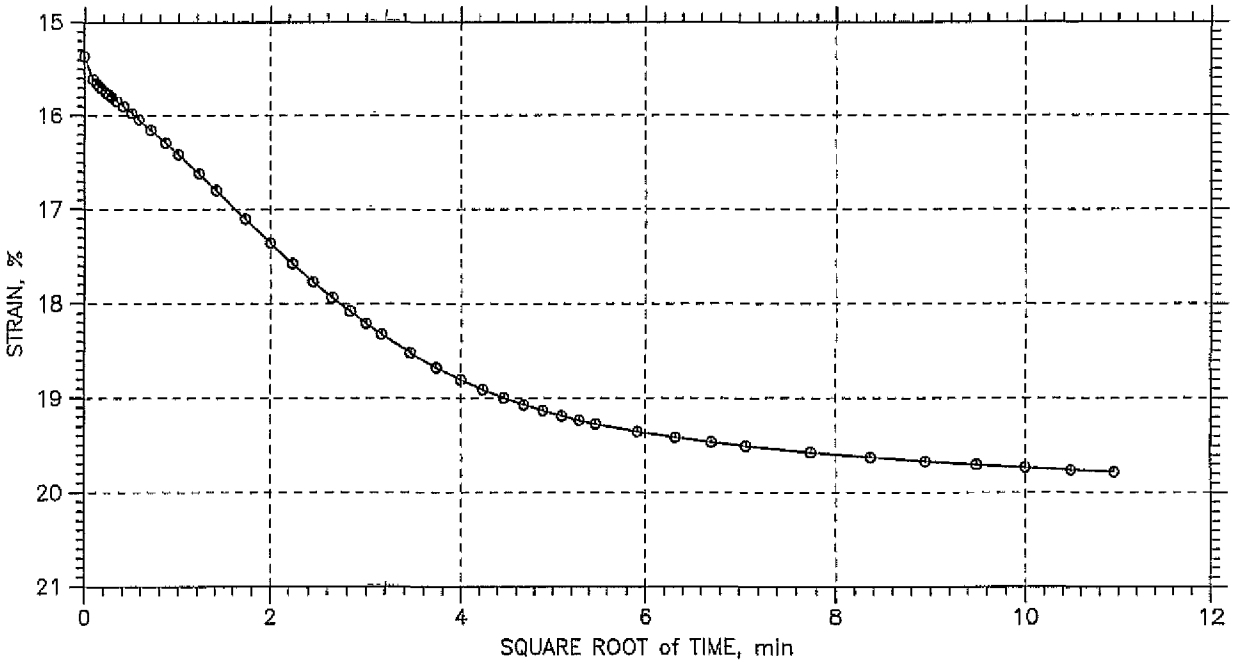
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 6 of 12

Stress: 4. tsf





GeoTesting express a subsidiary of Geocomp Corporation	Project: So. Windham	Location: ---	Project No.: GTX-7434
	Boring No.: ~~B-105~~ ★	Tested By: md	Checked By: jdt
	Sample No.: ---	Test Date: 05/02/07	Depth: 17-19 ft
	Test No.: C-1	Sample Type: Tube	Elevation: ---
	Description: Wet, gray clayey silt, very soft		
	Remarks: System C		

Fri, 11-MAY-2007 12:22:16 ★B208

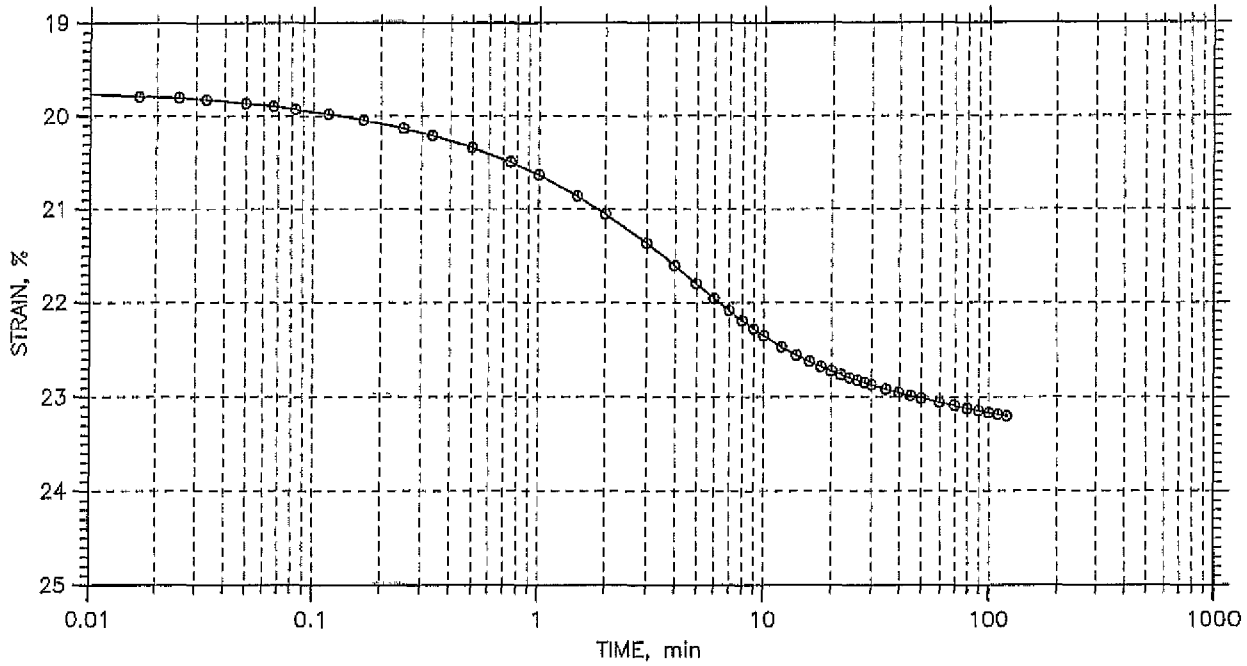
VIL_RESP03286

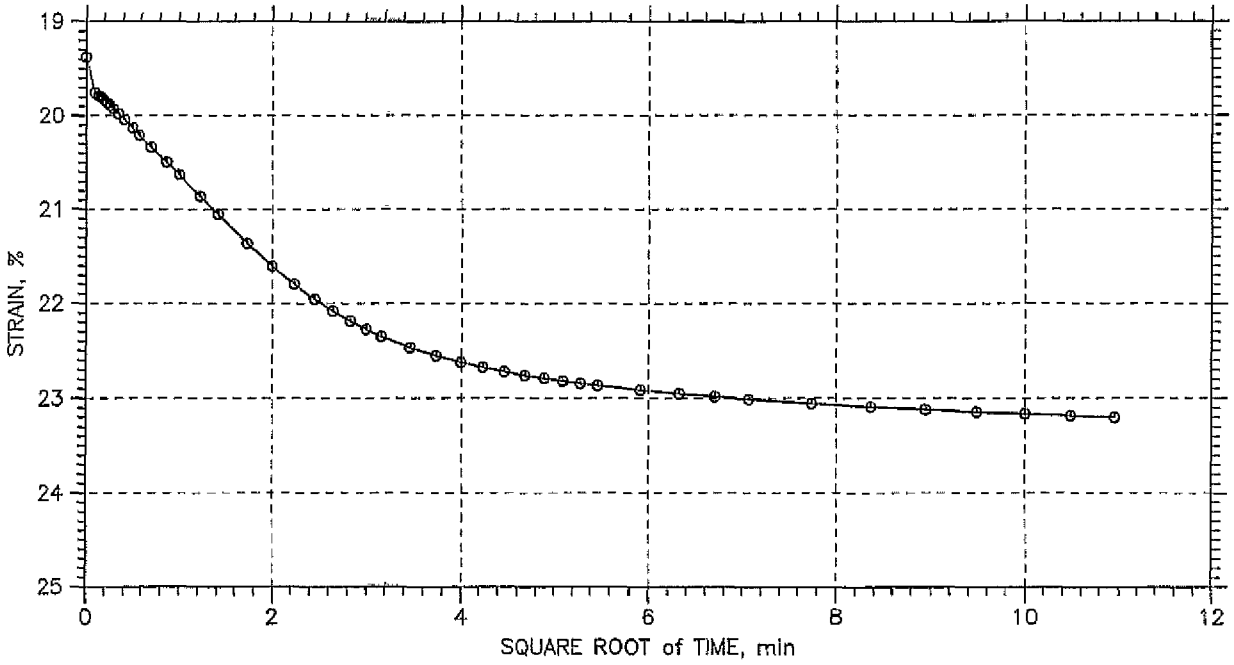
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 7 of 12

Stress: 8. tsf





GeoTesting express a subsidiary of Geocomp Corporation	Project: So. Windham	Location: ---	Project No.: GTX-7434
	Boring No.: ~~B-105~~ ☆	Tested By: md	Checked By: jdt
	Sample No.: ---	Test Date: 05/02/07	Depth: 17-19 ft
	Test No.: C-1	Sample Type: Tube	Elevation: ---
	Description: Wet, gray clayey silt, very soft		
	Remarks: System C		

Fri, 11-MAY-2007 12:22:16 ☆ B208 DEC.

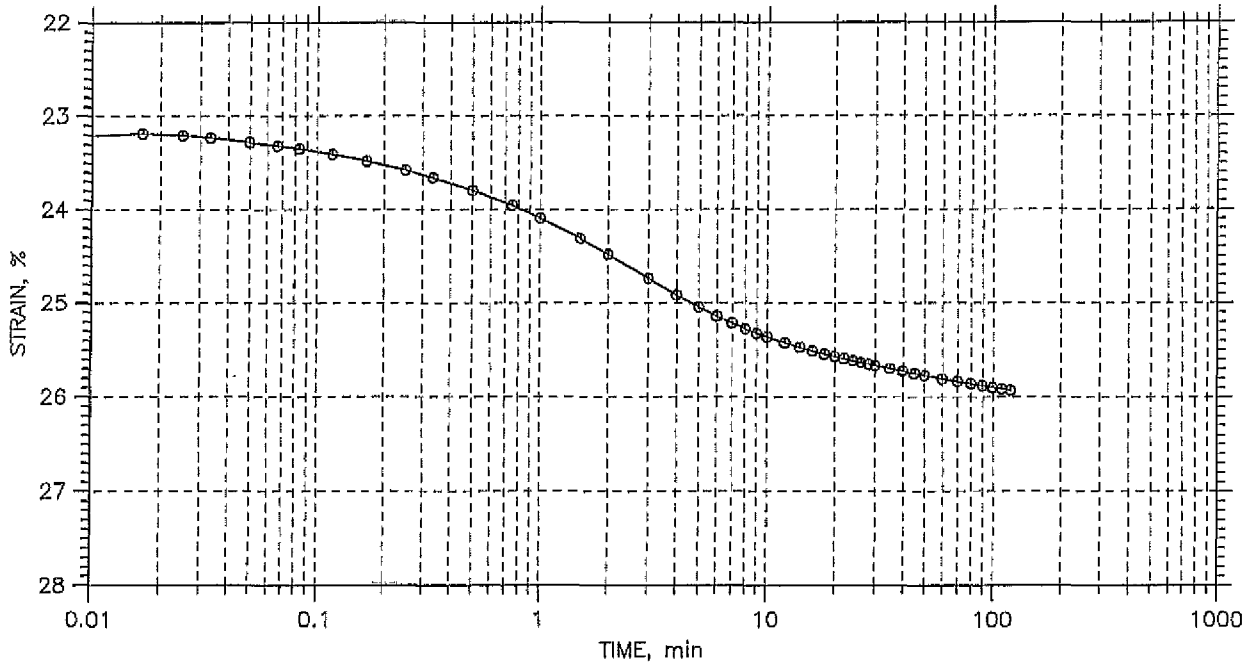
VIL_RESP03287

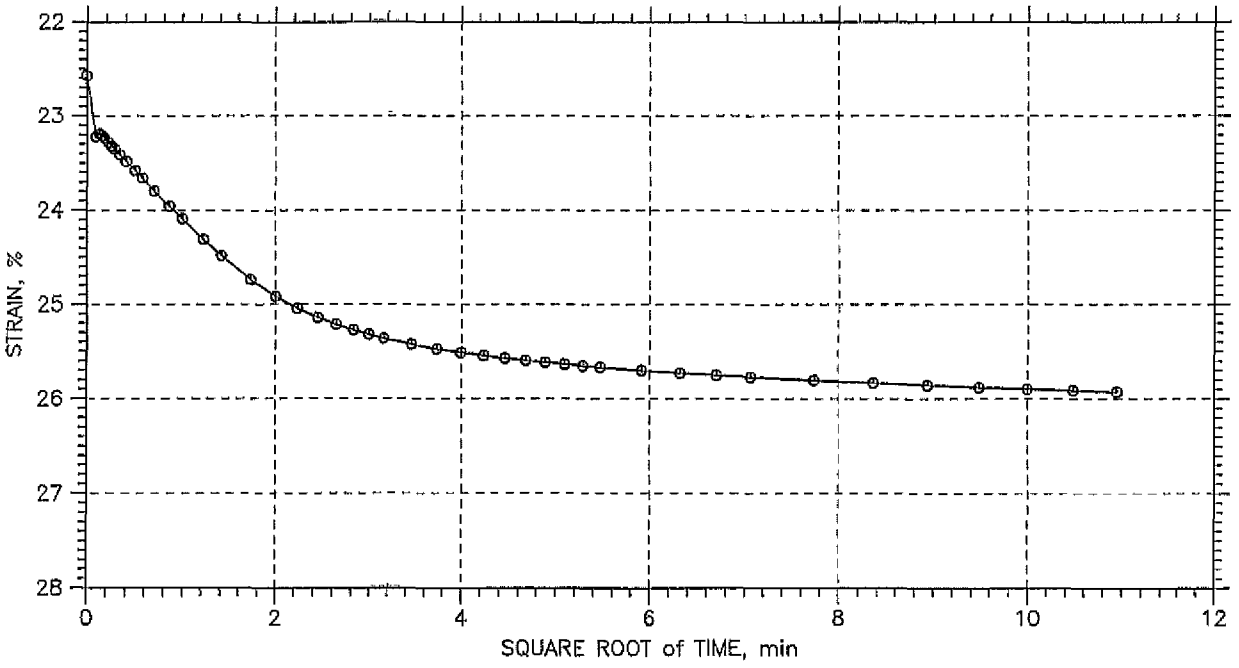
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 8 of 12

Stress: 16. tsf





GeoTesting express a subsidiary of Geocomp Corporation	Project: So. Windham	Location: ---	Project No.: GTX-7434
	Boring No.: ~~B-105~~ ☆	Tested By: md	Checked By: jdt
	Sample No.: ---	Test Date: 05/02/07	Depth: 17-19 ft
	Test No.: C-1	Sample Type: Tube	Elevation: ---
	Description: Wet, grdy clayey silt, very soft		
	Remarks: System C		

Fri, 11-MAY-2007 12:22:16 ☆ B209 D.E.G

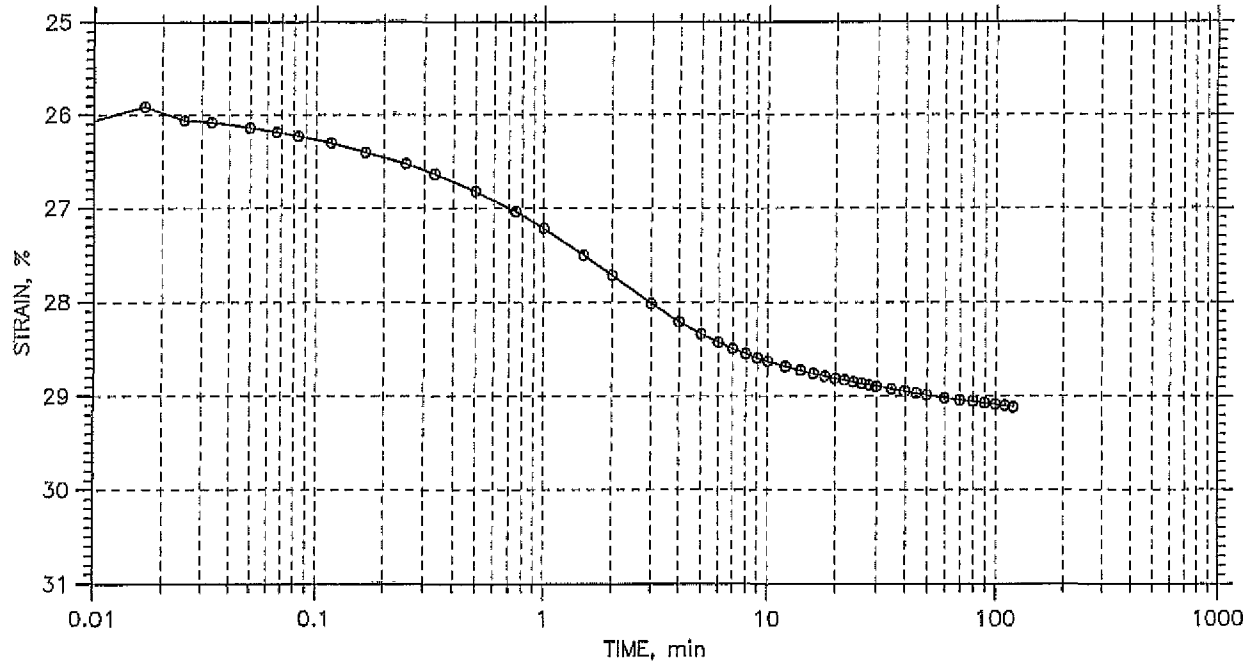
VIL_RESP03288

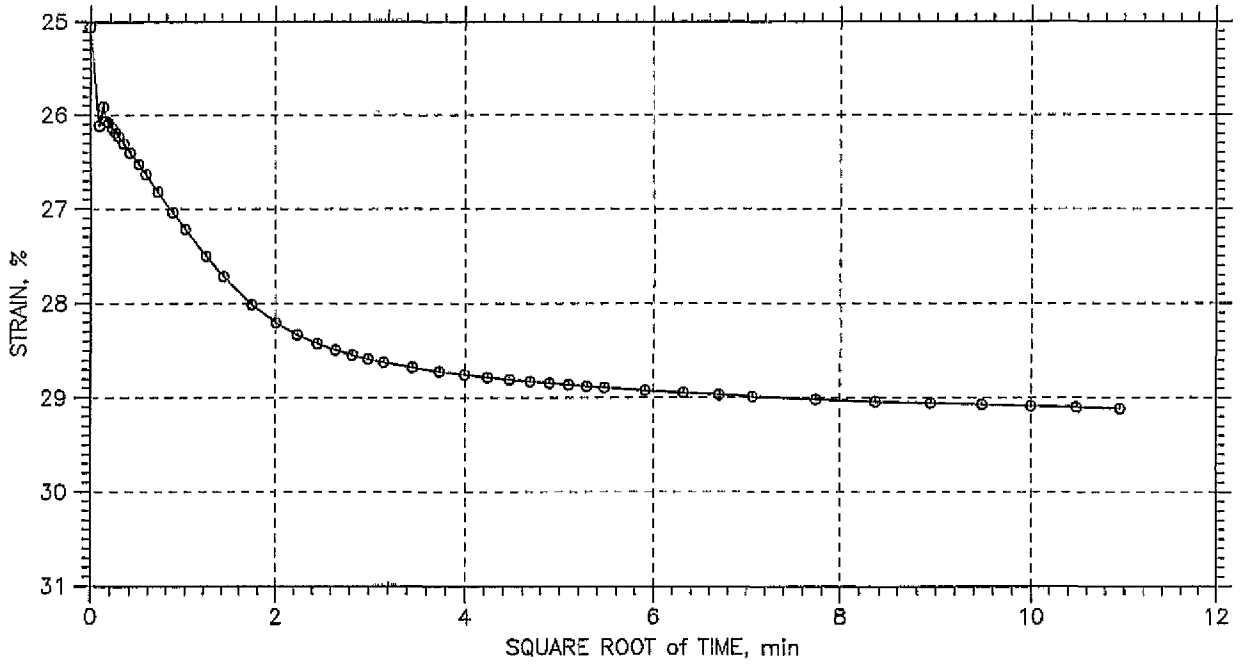
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 9 of 12

Stress: 32. tsf





GeoTesting express a subsidiary of Geocomp Corporation	Project: So. Windham	Location: ---	Project No.: GTX-7434
	Boring No.: ~~B-105~~ ★	Tested By: md	Checked By: jdt
	Sample No.: ---	Test Date: 05/02/07	Depth: 17-19 ft
	Test No.: C-1	Sample Type: Tube	Elevation: ---
	Description: Wet, gray clayey silt, very soft		
	Remarks: System C		

Fri, 11-MAY-2007 12:22:16 ★ B208 D.E.G.

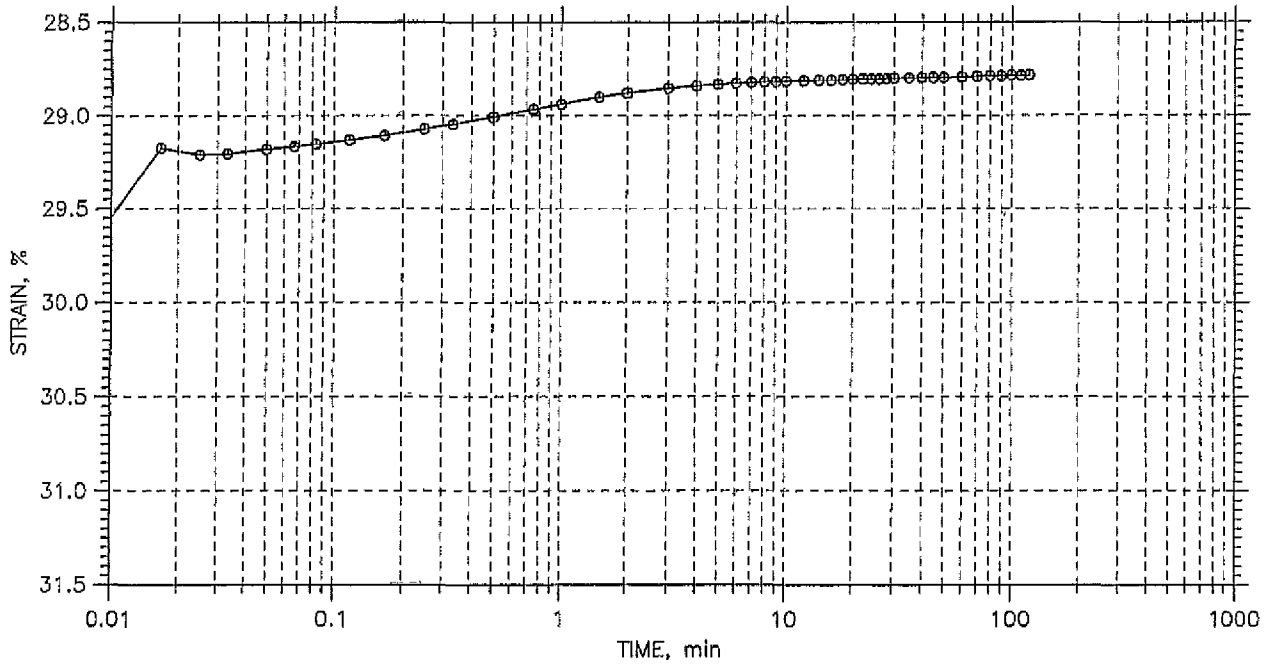
VIL_RESP03289

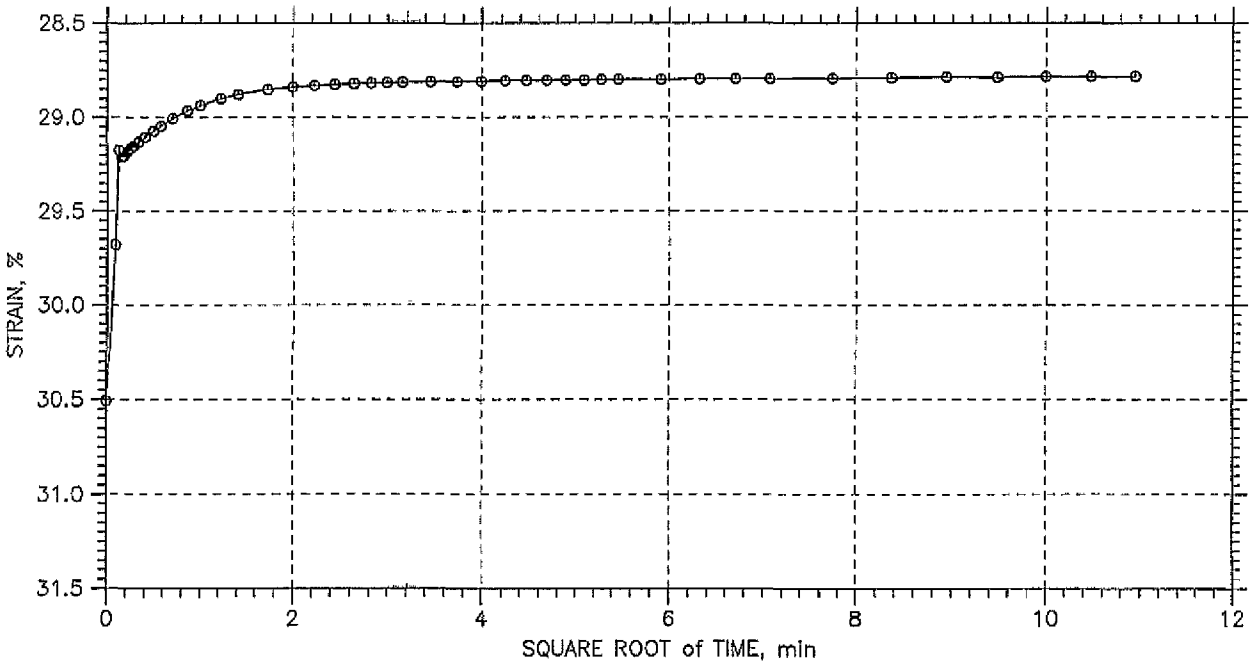
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 10 of 12

Stress: 8. tsf





GeoTesting express a subsidiary of Geocomp Corporation	Project: So. Windham	Location: ---	Project No.: GTX-7434
	Boring No.: ~~B-105~~ ☆	Tested By: md	Checked By: jdt
	Sample No.: ---	Test Date: 05/02/07	Depth: 17-19 ft
	Test No.: C-1	Sample Type: Tube	Elevation: ---
	Description: Wet, gray clayey silt, very soft		
	Remarks: System C		

Fri, 11-MAY-2007 12:22:16 ☆B208 D.E.G.

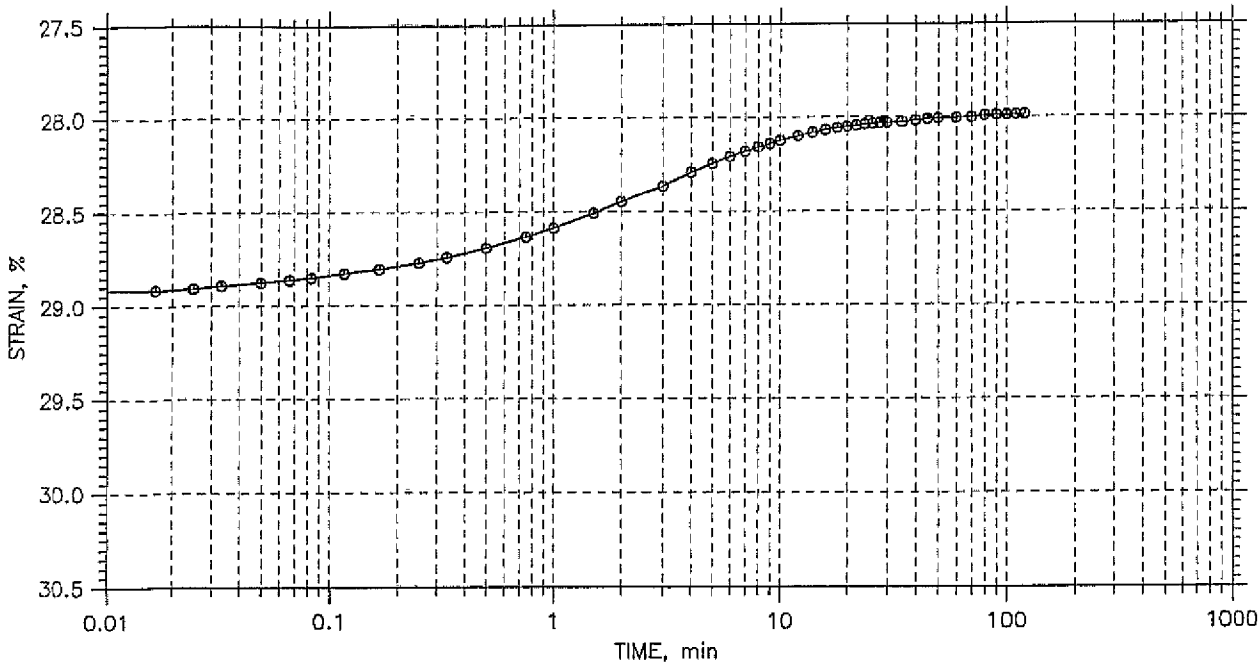
VIL_RESP03290

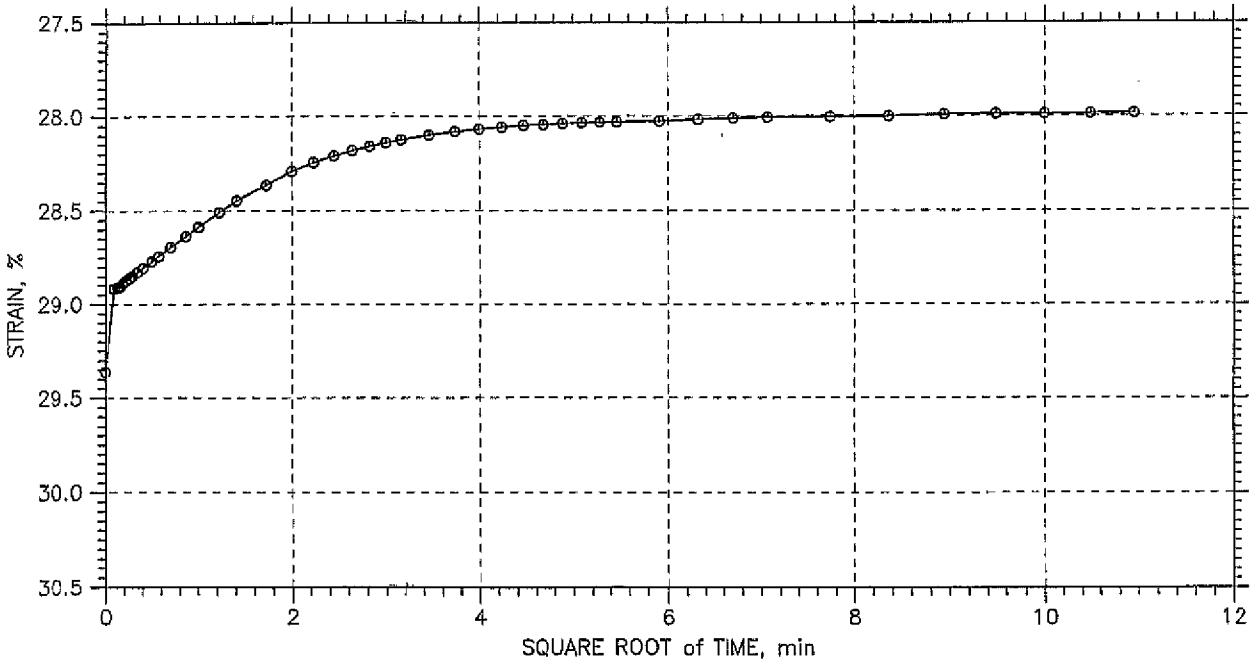
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 11 of 12

Stress: 2. tsf





GeoTesting express a subsidiary of Geocomp Corporation	Project: So. Windham	Location: ---	Project No.: GTX-7434
	Boring No.: ~~B-105~~ ☆	Tested By: md	Checked By: jdt
	Sample No.: ---	Test Date: 05/02/07	Depth: 17-19 ft
	Test No.: C-1	Sample Type: Tube	Elevation: ---
	Description: Wet, gray clayey silt, very soft		
	Remarks: System C		

Fri, 11-MAY-2007 12:22:16 ☆ B208 D.E.G.

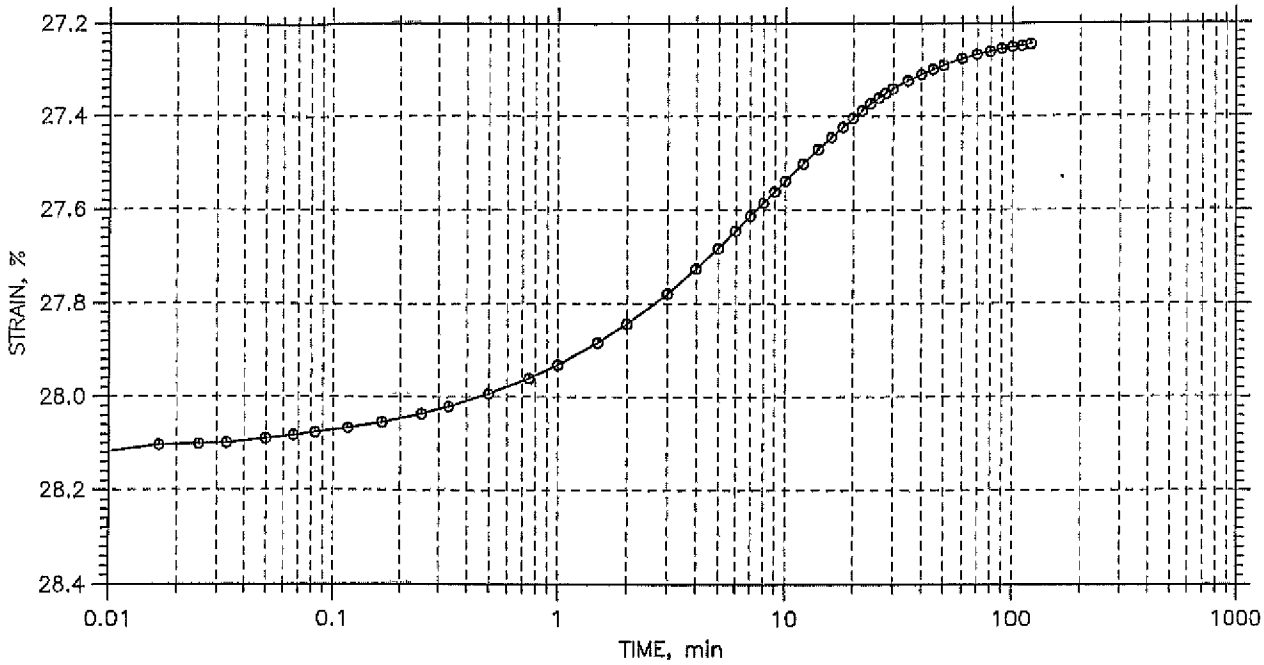
VIL_RESP03291

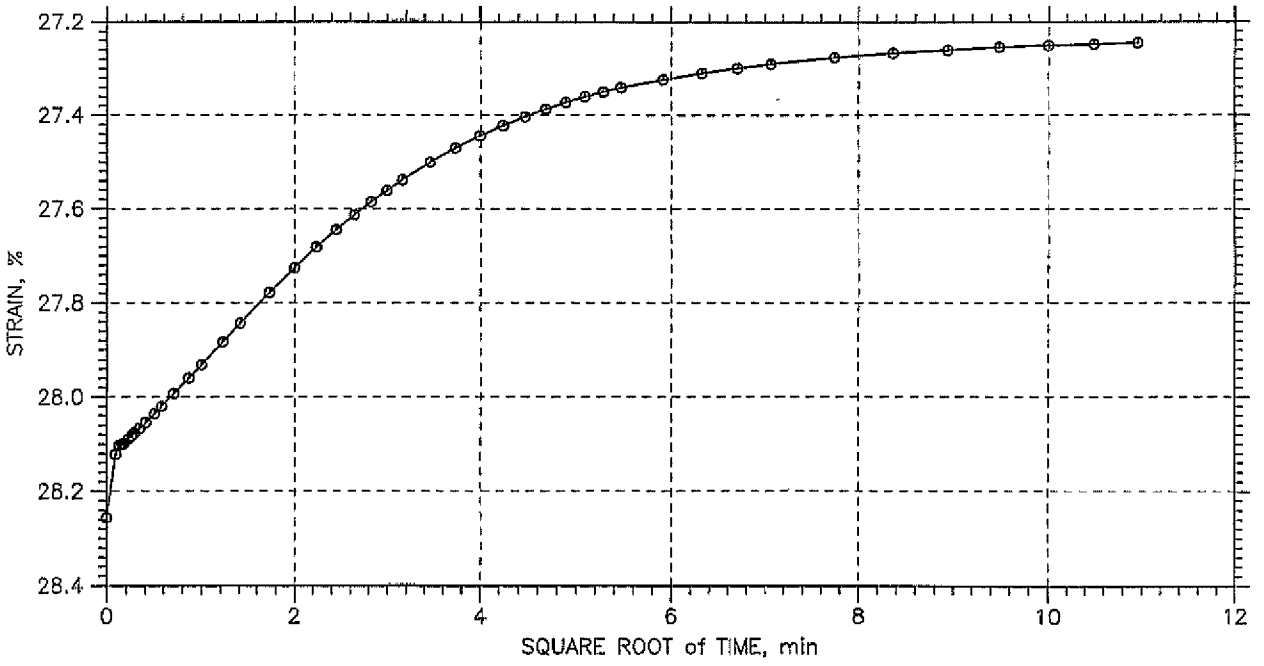
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 12 of 12

Stress: 0.5 tsf





GeoTesting express a subsidiary of Geocomp Corporation	Project: So. Windham	Location: ---	Project No.: GTX-7434
	Boring No.: ~~B-105~~ ☆	Tested By: md	Checked By: jdt
	Sample No.: ---	Test Date: 05/02/07	Depth: 17-19 ft
	Test No.: C-1	Sample Type: Tube	Elevation: ---
	Description: Wet, grdy clayey silt, very soft		
	Remarks: System C		

Fri, 11-MAY-2007 12:22:16 ☆B208 DEG.

VIL_RESP03292

BIDDING DOCUMENTS
FORMER KEDDY MILL REMEDIATION
7 DEPOT STREET
SOUTH WINDHAM, MAINE

DRAFT

Prepared by:

Ransom Environmental Consultants, Inc.
400 Commercial Street, Suite 404
Portland, Maine 04101
(207) 772-2891

Project 076063
November 1, 2007

PRE-BID MEETING: November 2, 2007 @ 10:00 AM
DUE DATE: November 19, 2007 by 2:00 PM

INTRODUCTION

Sealed proposals are requested for the **former Keddy Mill Remediation** consisting of, but not limited to, the following:

- The removal of asbestos containing materials and universal wastes from within portions of the former mill building;
- The removal of oil and polychlorinated biphenyls (PCB)-contaminated soils covering the floors of the former mill building;
- The removal, transport, and disposal of asbestos, oil and PCB-contaminated solid waste within the former mill building; and
- The removal, transport, and disposal of non-hazardous solid waste within the former mill building.

A mandatory Pre-Bid Meeting will be held on **Friday, November 2, 2007 at 10:00 AM.** The location will be at the former Keddy Mill site located at 7 Depot Street in Windham, Maine. A walk-through of the site will follow the meeting.

Proposals will be received by Ransom Environmental Consultants, Inc. located at 400 Commercial Street, Suite 404, in Portland, Maine 04101 until **2:00 PM on Monday, November 19, 2007.**

Bids shall be submitted on the form provided in the bid documents.

For additional project information or inquiries concerning the request for proposal, please contact Stephen J. Dyer, P.E. at Ransom Environmental Consultants, Inc. at (207) 772-2891.

HISTORY

The Keddy Mill site consists of a former steel mill located on 7 Depot Road in South Windham, Maine (refer to Figure 1). The approximately 6.5-acre parcel is bordered by Depot Street to the North, Maine Central Railroad tracks to the east, the Presumpscot River to the South, and Route 202 to the West. The site was reportedly first developed for industrial use in the 1700s, and over the years uses included a saw mill, grist mill, manufactured wood board mill and the steel mill whose remnants presently occupy the site.

The site is currently occupied by the former mill building constructed primarily of concrete and brick. The majority of the building consists of two levels, including a ground floor/basement that is partially below grade. Historic site plans indicate structures were added to the mill building over the years, including a boiler house, generator room, press building, melt building, storage and manufacturing structures, and offices. The forge shop and boiler house have been demolished.

SUMMARY OF ENVIRONMENTAL INVESTIGATIONS

The property has been the focus of several environmental investigations since 1995. The investigation reports include the following:

- Phase I Limited Environmental Assessment, Lot 7 of Map 38, Windham Township, South Windham, Cumberland County, Maine, by Consla Geotechnical Engineering, March 18, 1993.
- Environmental Site Assessment, Phase I & II, Former Steel Mill Property, Route 202 and Depot Street ,Windham, Maine, by S.W. Cole Engineering, Inc., November 17, 1997.
- Asbestos Survey Report, Former Industrial Building, 7 Depot Street, Windham, Maine, by Jacques Whitford Company, Inc., January 16, 2004.
- Report on Supplemental Site Investigation, 7 Depot Street, Windham, Maine by Jacques Whitford Company, Inc., March 9, 2004.

Review of these reports can be completed in Ransom's office by appointment.

The Phase I Limited Environmental Assessment conducted by Consla Geotechnical Engineering in 1993 identified potential sources of environmental impacts including numerous tanks, chemical storage containers, and former operations areas that had the potential to adversely impact the site.

Subsurface investigations by S.W. Cole in 1995 and 1996 included completion of twenty-four test pits targeting locations of former storage tanks and other areas of potential concern. Soil samples were field-screened and tested in a laboratory for fuel oil, pesticides, PCBs, or heavy metals. S.W. Cole identified heavy oil-impacted soil at the northern end of the site near Depot Street. The impacted soil was located in the vicinity of a two former above-ground heavy oil storage tanks (now removed). S.W. Cole removed approximately 11 tons of soil impacted by the heavy oil under the oversight of the Maine Department of Environmental Protection (MDEP). S.W. Cole identified no significant impacts from pesticides, PCBs, or heavy metals during their investigation.

In August 2003, Jacques Whitford completed supplemental investigations including soil sampling from test pits, soil borings, and the surface soil to evaluate areas of potential concern identified during previous site investigations including the following locations:

- Two former above ground fuel storage tanks (15,000 and 10,000 gallon capacity) near the railroad tracks on the eastern portion of the site where oil-stained soils were observed during a previous site investigation;
- Two 1,000 gallon underground wastewater tanks adjacent to the north wall of the facility;
- Former 3,000 gallon above-ground fuel tank located at the end of a rail spur on the eastern side of the site;
- Transformer pad/electrical substation on the southern side of the site;

- Former drum storage area at the southern end of the former mill building;
- Former garage at the southern end of the site; and
- A sump and area of broken concrete in the basement of the former Melt Building.

Sampling by Jacques Whitford also included testing of sludge and dirt/debris from floor surfaces inside the mill building for PCBs. The interior PCB sample locations sampled by Jacques Whitford included material from broken concrete as well as a floor sump in the building basement, dirt or debris piles on concrete floors in the building basement, sludge on the concrete floors in the first floor maintenance shop and sludge on the concrete floor near the former transformer area.

See attached Keddy Mill Site Plan (Figure C-100) showing PCB sample locations and results in the basement, sub-floor, first floor, and second floor of the former mill building.

A total PCB concentration of 174 mg/kg (Aroclor 1254 and Aroclor 1260) was detected in material collected from the floor sump located along the south wall of the building basement/ground floor (SS6). Confirmatory sampling from this location indicated 262 mg/kg PCBs (SS101A) and 570 mg/kg PCBs (SS101B – split sample). The area of broken concrete (SS5) contained 77 mg/kg total PCBs. Material sampled from the surface of the concrete floor inside the building contained total PCBs ranging from 11 mg/kg in the maintenance shop (SS8) to 138 mg/kg on the ground floor of the Melt Building (SS103). The PCBs detected included Aroclor 1254 and 1260.

Based on these results, Ransom conducted additional characterization of materials inside the mill building for PCBs, including the collection of surface wipe samples from the first floor hallway and office/storage areas at the south end of the mill building, collection of bulk samples of solid and oil material on the concrete floors throughout the mill building, collection of oil samples from cut or leaking oil piping, collection of sub-slab material where concrete had broken in vicinity of the former transformers on the first floor, and the collection of wood chips from oil-stained wood in the vicinity of former electrical equipment located in the basement and first floor.

PCBs were not detected in wipe samples IW-02 (2nd floor office area) and IW-03 (1st floor hall). Aroclor 1254 and Aroclor 1260 were detected at a total concentration of 44 µg/100 cm^2 in IW-01 (2nd floor stockroom).

Total PCBs were detected in bulk solid samples at concentrations ranging from non-detect in the Press Building (IS-08) to 320 mg/kg on the first floor of the Storage and Manufacturing area (IS-02). Four of the ten samples contained total PCBs with concentrations greater than 50 mg/kg. The PCBs detected were Aroclor 1248, 1254 and 1260.

Six oil samples were collected from cut or leaking oil lines in the mill building, including IS-03, IS-04, and IS-15 through IS-18. The oil samples appeared to consist of heavy heating oil (No. 6/Bunker C). Total PCBs in the oily materials were detected at concentrations ranging from non-detect in IS-18 to 240 mg/kg in IS-15. Two of the six samples of oil materials contained PCBs at concentrations greater than 50 mg/kg. PCB constituents included Aroclor 1242, Aroclor 1248 and Aroclor 1254.

Ransom collected one bulk sub-slab sample (IS-05) from an area of broken concrete flooring in the Storage and Manufacturing area on October 27, 2005. The soil sample contained total PCBs at a concentration of 97 mg/kg. The constituents were Aroclor 1254 (66 mg/kg) and Aroclor 1260 (31 mg/kg).

Ransom collected two samples of oil-stained wood in transformer areas, one from a platform in the former Generator Room (IWD-02), and one from a platform on the first floor of the Melt Building (IWD-01). The two wood chip samples contained total PCBs of 36.9 mg/kg (IWD-01) and 105 mg/kg (IWD-02). Aroclor 1242, 1254 and 1260 were identified.

The concentration of PCBs in bulk materials sampled inside the mill building to date range from non-detect to 570 mg/kg. Fifteen of the thirty samples collected exhibited total PCB concentrations greater than 50 mg/kg. The source of PCBs at the site is likely a combination of spills and leaks of PCB-containing mineral oil dielectric fluid (MODF) from transformers and other electrical equipment, PCB-containing lubricating/hydraulic oils, and PCB-contaminated fuel oil. Given uncertainty of the source, date of use and original concentration of PCBs in equipment in the mill building, sludge, dirt/debris and oily material on the floors and walls of the mill building are presumed to be "PCB Remediation Wastes."

See attached Table 1 outlining PCB results for the various locations and sampling methods.

In addition to identified PCB-contaminated materials within the former mill building, Jacques Whitford completed an initial Asbestos Survey in 2004. The survey identified asbestos-containing materials throughout the mill building, including within joint compound materials associated with sheetrock in the first and second floor office areas, textured wall material in the second floor stairwell, vinyl asbestos tiles and associated mastic covering the floor in the second floor office areas as well as floors in the second floor stairwell, window glazing and caulking associated with the parking lot-side windows in the first and second floor office areas as well as windows in the manufacturing portion of the first floor, transite boards utilized as walls within the first and second floors, textured ceiling material in the first floor offices, corrugated transite panels utilized as the exterior walls and roof of the southeastern warehouse, and small wood-framed window glazing in basement and sub-floor areas.

Ransom completed an additional asbestos survey for the site building on October 1, 2007. Suspect identified asbestos-containing materials were identified and sampled. Confirmatory samples of asbestos-containing materials previous identified during Jacques Whitford's survey were analyzed as well. Laboratory analysis of bulk samples found that there was asbestos present in amounts greater than one percent in the following materials: asbestos cement board panels (includes double-sided window panel and louvers), sink undercoating, cement backing, wood panel mastic, gasket debris, roofing materials, cement board, interior roof sealant, gloves, interior cement siding, light backing, electrical panel boards, paper board, joint compound, textured wall and ceiling material, floor tiles and mastic, window glazing, and window caulking. Asbestos-containing materials were identified within larger piles of solid waste debris throughout the interior of the building as well as the exterior perimeter. Debris piles within the building are potentially contaminated with both PCBs and asbestos, and will need to be removed and properly disposed of in accordance with State and federal regulations.

Refer to Appendix A for copies of the asbestos-containing materials surveys completed for the former Keddy Mill.

REMEDIATION OVERVIEW

PCB clean-up at the Site will be undertaken in three phases.

Phase I – Building Interior Sludge, Dirt/Debris and Oily Materials

The initial phase of PCB mitigation involves clean-up of sludge, dirt/debris and oily materials that have accumulated on floors and walls, removal of oil-filled piping inside the former mill building, and the removal of solid waste debris. The project that is the subject of these bidding documents is this phase. This plan addresses cleanup of sludge, dirt/debris, and oily materials containing PCBs inside the building. Cleanup of asbestos-containing materials, universal wastes, and non-hazardous solid waste debris will also be completed during Phase I activities. Estimates of quantities of hazardous and non-hazardous materials to be remediated are included in the attached Bid Form.

The quantity of PCB remediation waste has been estimated based on visual assessment of approximate material thickness and square footage of areas covered with sludge, dirt/debris and oily material. The following table summarizes the estimates.

Location	Estimated Impacted Area (sq. ft.)	Estimated Thickness (in)	Estimated Volume (cubic yards)
Maintenance Shop Area	4,200	0.5	6.5
Melt Building–ground	10,000	0.5	15
Melt Building–1st	10,000	0.5	15
Storage & Manufacturing–ground	6,000	0.25	4.7
Storage & Manufacturing–1st	6,000	0.25	4.7
Generator Room	400	0.25	0.3
Fuel piping in Melt Building and Storage/Manufacturing Area	Not Applicable	Not Applicable	10
Estimated Total (cubic yards)			56.2

Specific PCB-contaminated locations are not delineated on the site plans due to the ubiquitous presence of these materials within the mill building. As a result, sludge, dirt/debris and oily materials on floors, walls and in fuel piping will be presumed contaminated with PCBs (>1 mg/kg) and will be removed for proper disposal at a PCB disposal facility.

The quantity of asbestos-containing materials has been estimated based on the asbestos survey completed by Ransom on October 1, 2007 (included in Appendix A). The following table provides estimate quantities of identified asbestos-containing materials.

MATERIAL	LOCATION	ESTIMATED QUANTITY
Interior Asbestos Cement Board Panels (Includes double sided window panel and louvers)	Throughout	2,000 SF
Corrugated Exterior Asbestos Cement Board Siding	Warehouse Portion of Building	7,500 SF
Corrugated Asbestos Board Roofing	Warehouse Portion of Building	6,000 SF
Miscellaneous Exterior Asbestos Cement Board	Exterior - Platform with sloped roof on river side	300 SF
Asbestos Cement Board Debris	Exterior – Perimeter of Building and Grounds	---
Sink Undercoating	2nd Floor Kitchen	1 Each
Debris Including: 1. Gaskets (hard and cloth); 2. Asbestos Cement Board; 3. Gloves; 4. Canvas Backing; and 5. Paperboard	Located throughout building	---
Wood Panel Mastic	2nd Floor Offices	325 SF
Residual Roofing Material	Loading Dock Grounds	---
Interior Roof Sealant	1st Floor East	30 SF
Light Backing	1st Floor Offices	2 Each
Black Electrical Panel Board	Throughout	200 SF
Roof Including: 1. Sealants; 2. Field; and 3. Flashing	Roof	22,000 SF
Joint Compound	1st Floor and 2nd Floor Office Areas	5,000 SF
Textured Wall Material	2nd Floor Stairwell	400 SF
12-inch by 12-inch Brown Floor Tile	2nd Floor office Spaces	1,700 SF
Mastic associated with 12-inch by 12-inch Brown Floor Tile	2nd Floor Office Spaces	
12-inch by 12-inch Black Floor Tile	2nd Floor Stair Landing	120 SF
Mastic associated with 12-inch by 12-inch Black Floor Tile	2nd Floor Stair Landing	
Window Glazing	Exterior Windows	68 Windows
Window Caulking	Exterior Windows	
12-inch by 12-inch White Floor Tile	2nd Floor Office Space	300 SF
Mastic associated with 12-inch by 12-inch White Floor Tile	2nd Floor Office Space	
Textured Ceiling Material	2nd Floor Office Space	450 SF

Phase II–Building Interior Porous Surfaces

This phase is not included as part of this project, and is presented for information purposes. Following removal of the interior sludge, dirt/debris and oily materials, sampling and testing of porous concrete and wood surfaces will be undertaken to determine additional mitigation requirements. Many of these surfaces are covered with a layer of sludge, dirt/debris or oily materials, thus it is proposed that the sludge, dirt/debris and oily materials are removed and properly disposed prior to sampling of the underlying porous surface. This approach will allow improved visual identification of stained surfaces and permit more representative sampling of the porous material for PCB impacts. A separate plan will be presented that details the supplemental testing and methodology for mitigation of interior porous surfaces.

Phase III–Soils

This phase is not included as part of this project, and is presented for information purposes. Preliminary testing has identified PCBs in soils both exterior to and beneath the site building. Due to restricted access, additional sampling and testing of soils will be undertaken following partial demolition of the Site Building. A separate plan will be presented that details the supplemental testing and methodology for mitigation of site soils.

PROJECT REMEDIATION

The remediation work proposed in the Self-Implementation Cleanup Plan is being undertaken by Village at Little Falls, LLC in order to initiate Site redevelopment activities which include demolition of the former mill building. The site is proposed to be redeveloped with residential units.

Attachment A includes the technical specifications for this remediation project (Phase I Remediation).

Ransom will be on-site to oversee contractor removal of PCB-contaminated sludge, dirt/debris, oily material and associated piping, asbestos-containing materials, universal wastes, and non-hazardous solid waste from the mill building. Depending on the consistency of the material, PCB-contaminated dirt, sludge, exposed sub-slab soil, and oily materials will be recovered by scraping/shoveling into storage containers. Dust suppression, such as application of a spray mist, will be implemented on an as-needed basis.

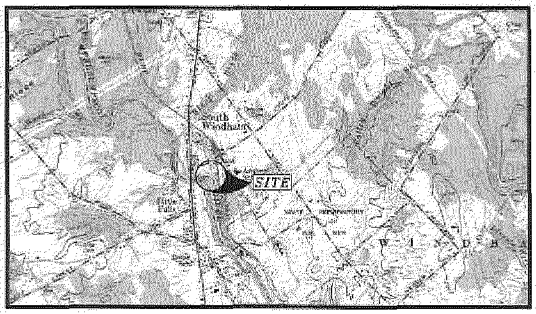
Collected materials will be stored in labeled roll-off containers. The containers will be kept closed except during transfer of waste to the containers. Used containment materials (i.e., plastic sheeting, tape, lumber) will be managed as PCB Remediation Waste. Following appropriate waste characterization activities, the PCB Remediation Waste is to be appropriately disposed of at a facility licensed to handle the waste.

Following the removal of the PCB-contaminated sludge, dirt/debris, oily materials and associated piping from the mill building, Ransom will conduct sampling of the underlying concrete to assess the potential for residual PCBs. If PCBs are identified at concentrations greater than 1 mg/kg, a plan for mitigation of the concrete will be prepared and submitted to EPA.

Asbestos-containing materials, universal wastes, containerized oil and hazardous materials, and non-hazardous solid waste will be properly removed from the mill building as described in the technical specifications and disposed of according to State and federal regulations.

SPECIAL CONDITIONS

Hours of operation for site remediation will be between 7:00 AM and 6:00 PM.



LOCATION MAP

NOT TO SCALE

KEY

AREAS WITH CONCENTRATED ASBESTOS DEBRIS

INTERIOR ASBESTOS CEMENT BOARD PANELS

EXTERIOR ASBESTOS CEMENT BOARD PANELS

ASBESTOS CEMENT CORRUGATED ROOFING

ASBESTOS-CONTAINING JOINT COMPOUND/TEXTURE MATERIAL

PILES OF MISCELLANEOUS SOLID WASTE

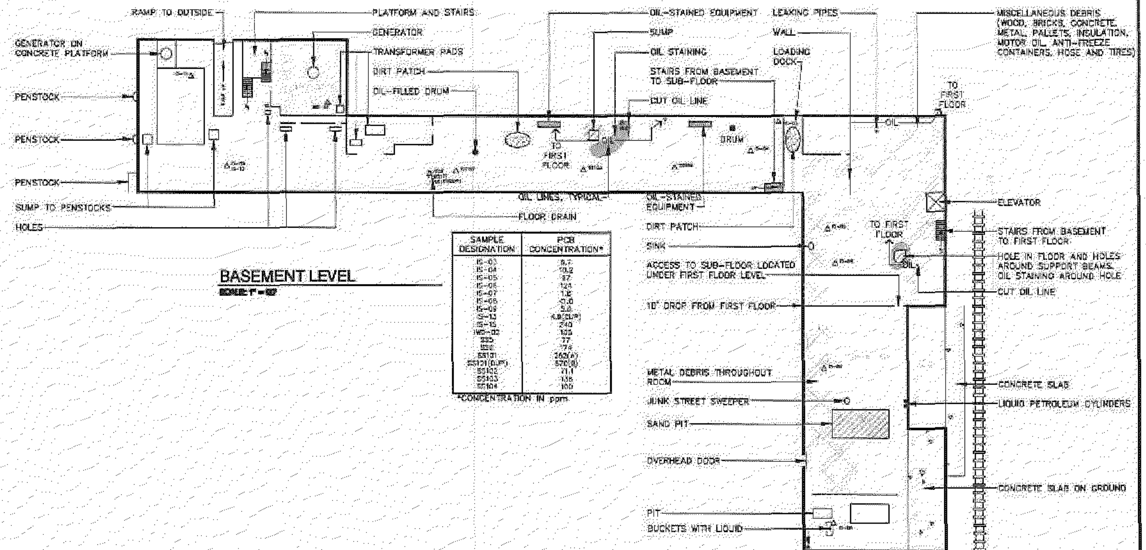
EXPOSED PCB CONTAMINATED SUB-SLAB SOIL

Ⓢ SINK UNDERCOAT

Ⓛ LIGHT FIXTURE BACKING

GENERAL NOTES

1. ALL DIRT/SLUDGE COVERING FLOORS TO BE SCRAPED OFF, TRANSPORTED OFF-SITE AND PROPERLY DISPOSED AS PCB-CONTAMINATED WASTE. DIRT/SLUDGE IS DISTRIBUTED THROUGHOUT MILL BUILDING.
2. ALL OBVIOUS WOOD, PLASTIC AND METAL DEBRIS TO BE DISPOSED AS SOLID WASTE OR RECYCLED AS APPROPRIATE.
3. OIL-STAINED OR ASBESTOS-CONTAINING MATERIALS TO BE SEGREGATED FROM SOLID WASTE AND PROPERLY DISPOSED.

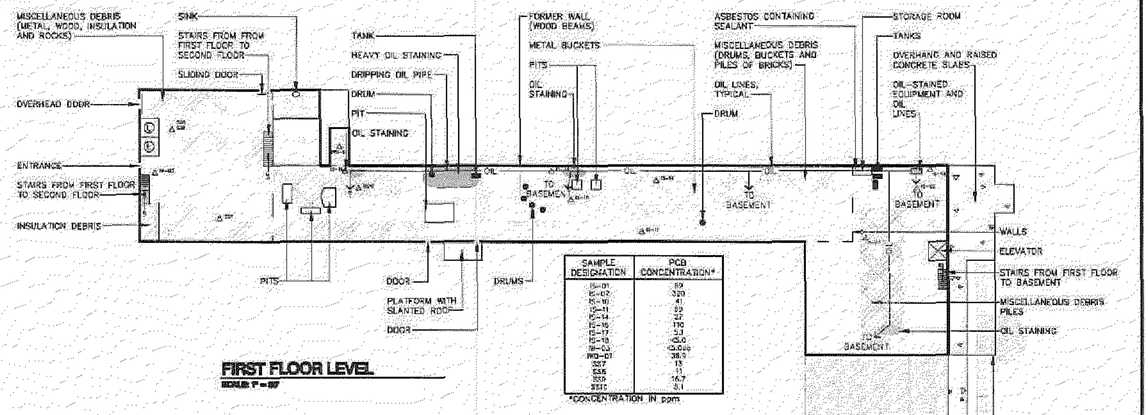


SAMPLE DESIGNATION	PCB CONCENTRATION*
IS-03	5.7
IS-04	10.2
IS-05	87
IS-06	124
IS-07	1.2
IS-08	<1.0
IS-09	5.0
IS-13	4.8(DUP)
IS-15	240
IWD-02	105
SS5	77
SS6	174
SS101	262(A)
SS101(DUP)	570(B)
SS102	11.1
SS103	136
SS104	100

*CONCENTRATION IN ppm

BASEMENT LEVEL

SCALE: 1" = 60'

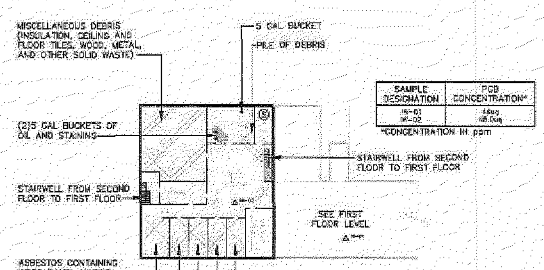


SAMPLE DESIGNATION	PCB CONCENTRATION*
IS-01	69
IS-02	320
IS-10	41
IS-11	82
IS-14	27
IS-16	110
IS-17	3.1
IS-18	<5.0
IW-03	<5.0ug
IWD-01	38.9
SS7	15
SS8	11
SS9	16.7
SS10	3.1

*CONCENTRATION IN ppm

FIRST FLOOR LEVEL

SCALE: 1" = 60'



SAMPLE DESIGNATION	PCB CONCENTRATION*
IS-01	44ug
IW-02	<5.0ug

*CONCENTRATION IN ppm

SECOND FLOOR LEVEL

SCALE: 1" = 60'

FORMER KEDDY MILL

7 DEPOT STREET
WINDHAM, MAINE

Prepared for:

HUDSON REALTY CAPITAL, LLC
2 MARKET STREET, 6TH FLOOR
PORTLAND, MAINE

STATE OF MAINE
STEPHEN A. DYER #7934
LICENSED PROFESSIONAL ENGINEER

RANSOM
Environmental Consultants, Inc.
400 Commercial Street, Suite 404
Portland, ME 04101
Tel. (207) 772-2891
Fax (207) 772-3248

KEDDY MILL
SITE PLAN

No.	Revision/Issue	Date
A	ISSUED FOR	

Designed by: SJD
Checked by: SJD
Drawn by: JAR
Approved by: SJD
Project: 076063
Date: SEPT 06, 2007
Sheet: C-100

VIL_RESP03301

ATTACHMENT A

Technical Specifications
Phase I Remediation

ATTACHMENT A – BIDDING DOCUMENTS
TABLE OF CONTENTS
FORMER KEDDY MILL
7 DEPOT STREET
WINDHAM, MAINE

LIST OF FIGURES

LIST OF TABLES

LIST OF ATTACHMENTS

SECTION 00100

INSTRUCTIONS TO BIDDERS

1.0 DEFINED TERMS

Terms used in these Instructions to Bidders which are defined in the General Conditions have the meanings assigned to them in the General Conditions.

Certain additional terms used in these Instructions to Bidders have the meanings indicated below which are applicable to both the singular and plural thereof.

1.1 Bidder

One who submits a Bid directly to Owner as distinct from a sub-bidder, who submits a bid to a Bidder.

1.2 Successful Bidder

The lowest, responsible and responsive Bidder to whom Owner (on the basis of Owner's evaluation as hereinafter provided) makes an award.

1.3 Owner

The Owner of the project site:

Stephen Etzel
Hudson Realty, LLC
2 Market Street
Portland, Maine 04101

1.4 Engineer

The Engineer contracted by the Owner:

Ransom Environmental Consultants, Inc.
400 Commercial Street
Portland, Maine 04101

2.0 COPIES OF BIDDING DOCUMENTS

2.1 Complete sets of the Bidding Documents in the number and for the cost, if any, stated in the Advertisement or Invitation to Bid may be obtained from Owner.

2.2 Complete sets of Bidding Documents must be used in preparing Bids; neither Owner nor Engineer assume any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.

2.3 Owner and Engineer in making copies of Bidding Documents available on the above terms do so only for the purpose of obtaining Bids for the Work and do not confer a license or grant for any other use.

3.0 QUALIFICATIONS OF BIDDERS

To demonstrate qualifications to perform the Work, each Bidder must be prepared to submit within five (5) days after Bid opening upon Owner's request detailed written evidence such as financial data, previous experience, present commitments and other such data as may be called for below. Each Bid must contain evidence of Bidder's qualification to do business in the State of Maine or covenant to obtain such qualification prior to award of the contract.

4.0 EXAMINATION OF CONTRACT DOCUMENTS AND SITE

4.1 It is the responsibility of each Bidder before submitting a Bid:

4.1.1 To examine thoroughly the Contract Documents and other related data identified in the Bidding Documents (including "technical data" referred to below).

4.1.2 To visit the site to become familiar with and satisfy Bidder as to the general, local and site conditions that may affect cost, progress, performance or furnishing of the Work.

4.1.3 To consider federal, state and local Laws and Regulations that may affect cost, progress, performance or furnishing of the Work.

4.1.4 To study and carefully correlate Bidder's knowledge and observations with the Contract Documents and such other related data.

4.1.5 To promptly notify Engineer of all conflicts, errors, ambiguities or discrepancies which Bidder has discovered in or between the Contract Documents and such other related documents.

4.2 Reference is made to the Contract Documents for identification of:

4.2.1 Those reports of explorations and tests of subsurface conditions at or contiguous to the site which have been utilized by Engineer in preparation of the Contract Documents. Bidder may rely upon the general accuracy of the "technical data" contained in such reports but not upon other data, interpretations, opinions or information contained in such reports or otherwise relating to the subsurface conditions at the site, nor upon the completeness thereof for the purposes of bidding or construction.

4.2.2 Those drawings of physical conditions in or relating to existing surface and subsurface structures (except Underground Facilities) which are at or contiguous to the site that have been utilized by Engineer in preparation of the Contract Documents. Bidder may rely upon the general accuracy of the "technical data" contained in such drawings but not upon other data, interpretations, opinions or information shown or indicated in such drawings or otherwise relating to such structures, nor upon the completeness thereof for the purposes of bidding or construction.

Copies of such reports and drawings will be made available by Owner to any Bidder on request. Those reports and drawings are not part of the Contract Documents, but the "technical data" contained therein upon which Bidder is entitled to rely as provided in Paragraph 4.2 of the General Conditions. Bidder is responsible for any interpretation of conclusion drawn from any "technical data" or any such data, interpretations, opinions or information.

4.2.3 Information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the site is based upon information and data furnished to Owner and Engineer by owners of such Underground Facilities or others, and Owner and Engineer do not assume responsibility for the accuracy or completeness thereof unless it is expressly provided otherwise in the Supplementary Conditions.

4.3 Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to subsurface conditions, other physical conditions and Underground Facilities, and possible changes in the Contract Documents due to differing or unanticipated conditions appear in Paragraphs 4.2 and 4.3 of the General Conditions.

4.4 Before submitting a Bid each Bidder will be responsible to obtain such additional or supplementary examinations, investigations, explorations, tests, studies and data concerning conditions (surface, subsurface and Underground Facilities) at or contiguous to the site or otherwise, which may affect cost, progress, performance or furnishing of the Work or which relate to any aspect of the means, methods, techniques, sequences or procedures of construction to be employed by Bidder and safety precautions and programs incident thereto or which Bidder deems necessary to determine its Bid for performing and furnishing the Work in accordance with the time, price and other terms and conditions of the Contract Documents.

4.5 On request, Owner will provide each Bidder access to the site to conduct such examinations, investigations, explorations, tests and studies as each Bidder deems necessary for submission of a Bid. Bidder must fill all holes and clean up and restore the site to its former conditions upon completion of such explorations, investigations, tests and studies.

4.6 The submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article 4, that without exception the Bid is premised upon performing and furnishing the Work required by the Contract Documents and applying the specific means, methods, techniques, sequences or procedures of construction (if any) that may be shown or indicated or expressly required by the Contract Documents, that Bidder has given Engineer written notice of all conflicts, errors, ambiguities and discrepancies that Bidder has discovered in the Contract Documents and the written resolutions thereof by Engineer is acceptable to Bidder, and that the Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performing and furnishing the Work.

5.0 AVAILABILITY OF LANDS FOR WORK, ETC.

The lands upon which the Work is to be performed, rights-of-way and easements for access thereto and other lands designated for use by Contractor in performing the Work are identified in the Contract Documents. All additional lands and access thereto required for temporary construction facilities, construction equipment or storage of materials and equipment to be incorporated in the Work are to be obtained and paid for by Contractor. Easements for permanent structures or permanent changes in existing facilities are to be obtained and paid for by Owner unless otherwise provided in the Contract Documents.

6.0 INTERPRETATIONS AND ADDENDA

6.1 All questions about the meaning or intent of the Bidding Documents are to be directed to Engineer. Interpretations or clarifications considered necessary by Engineer in response to such questions will be issued by Addenda mailed or delivered to all parties recorded by Engineer as having received the Bidding Documents. Questions received less than five (5) days prior to the date for opening of Bids may not be answered. Only questions answered by formal written Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.

6.2 Addenda may also be issued to modify the Bidding Documents as deemed advisable by Owner or Engineer.

7.0 SUBSTITUTE AND "OR EQUAL" ITEMS

The Contract, if awarded, will be on the basis of materials and equipment described in the Drawings or specified in the Specifications without consideration of possible substitute or "or equal" items. Whenever it is indicated in the Drawings or specified in the Specifications that a substitute or "or equal" item of material or equipment may be furnished or used by Contractor if acceptable to Engineer. Application for such acceptance will not be considered by Engineer until after the Effective Date of the Agreement. The procedure for submission of any such application by Contractor and consideration by Engineer is set forth in Paragraphs 6.7.1, 6.7.2, and 6.7.3 of the General Conditions and may be supplemented in the General Requirements.

8.0 SUBCONTRACTORS, SUPPLIERS AND OTHERS

8.1 If the Supplementary Conditions require the identity of certain Subcontractors, Suppliers and other persons and organizations (including those who are to furnish the principal items of material and equipment) to be submitted to Owner in advance of a specified date prior to the Effective Date of the Agreement, apparent Successful Bidder, and any other Bidder so requested, shall within five (5) days after Bid opening submit to Owner a list of all such Subcontractors, Suppliers and other persons and organizations proposed for those portions of the Work for which such identification is required. Such list shall be accompanied by an experience statement with pertinent information regarding similar projects and other evidence of qualification for each such Subcontractor, Supplier, person or organization if requested by Owner.

An Owner or Engineer who after due investigation has reasonable objection to any proposed

Subcontractor, Supplier, other person or organization, may before the Notice of Award is given request apparent Successful Bidder to submit an acceptable substitute in which case apparent Successful Bidder shall submit an acceptable substitute, that Bidder's Bid price will be increased (or decreased) by the difference in cost occasioned by such substitution and Owner may consider such price adjustment in evaluating Bids and making the contract award.

8.2 In contracts where the Contract Price is on the basis of Cost-of-the-Work Plus a Fee, apparent Successful Bidder, prior to the Notice of Award, shall identify in writing to Owner those portions of the Work that such Bidder proposes to subcontract and after the Notice of Award may only subcontract other portions of the Work with Owner's written consent.

8.3 No Contractor shall be required to employ any Subcontractor, Supplier, other person or organization against whom Contractor has reasonable objection.

9.0 BID FORM

9.1 The Bid Form is included with the Bidding Documents; additional copies may be obtained from the Owner.

9.2 All blanks on the Bid Form must be completed by printing in black ink or by typewriter.

9.3 Bids by corporations must be executed in the corporate name by the president or a vice-president (or other corporate officer accompanied by evidence of authority to sign). The corporate address and state of incorporation must be shown below the signature.

9.4 Bids by partnerships must be executed in the partnership name and signed by a partner, whose title must appear under the signature and the official address of the partnership must be shown below the signature.

9.5 All names must be typed or printed in black ink below the signature.

9.6 The Bid shall contain an acknowledgement of receipt of all Addenda (the numbers of which must be filled in on the Bid Form).

9.7 The address and telephone number for communications regarding the Bid must be shown.

9.8 Evidence of authority to conduct business as an out-of-state corporation in the State of Maine where the Work is to be performed shall be provided in accordance with Paragraph 3 above. State contractor license number, if any, must also be shown.

9.9 Bid form provides for prices for Base Bid and any Alternates. The Base Bid price shall be used for basis of award. The price of the Bid for any Alternates will be added to the price of the Base Bid if Owner selects alternate.

10.0 SUBMISSION OF BIDS

Bids shall be submitted at the time and place indicated in the Advertisement or Invitation to Bid and shall be enclosed in an opaque sealed envelope, marked with the Project title (and, if applicable, the designated portion of the Project for which the Bid is submitted) and name and address of Bidder and accompanied by the Bid security and other required documents. If the Bid is sent through the mail or other delivery system the sealed envelope shall be enclosed in a separate envelope with the notation "BID ENCLOSED" on the face of it.

11.0 MODIFICATION AND WITHDRAWAL OF BIDS

Bids may be modified or withdrawn by an appropriate document duly executed (in the manner that a Bid must be executed) and delivered to the place where Bids are to be submitted at any time prior to the opening of Bids.

12.0 OPENING OF BIDS

Bids will be opened and (unless obviously non-responsive) read aloud publicly at the place where Bids are to be submitted. An abstract of the amounts of the base Bids and major alternates (if any) will be made available to Bidders after the opening of Bids.

13.0 BIDS TO REMAIN SUBJECT TO ACCEPTANCE

All bids will remain subject to acceptance for thirty (30) days after the day of the Bid opening, but Owner may, in sole discretion, release any Bid and return the Bid security prior to that date.

14.0 AWARD OF CONTRACT

14.1 Owner reserves the right to reject any or all Bids, including without limitation the rights to reject any or all nonconforming, nonresponsive, unbalanced or conditional Bids and to reject the Bid of any Bidder if Owner believes that it would not be in the best interest of the Project to make an award to that Bidder, whether because the Bid is not responsive or the Bidder is unqualified or of doubtful financial ability or fails to meet any other pertinent standard or criteria established by Owner. Owner also reserves the right to waive all informalities not involving price, time or changes in the Work and to negotiate contract terms with the Successful Bidder. Discrepancies between the multiplication of units of Work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum. Discrepancies between words and figures will be resolved in favor of the words.

14.2 In evaluating Bids, Owner will consider the qualifications of Bidders, whether or not the Bids comply with the prescribed requirements, and such alternates, unit prices and other data, as may be requested in the Bid Form or prior to the Notice of Award.

14.3 Owner may consider the qualifications and experience of Subcontractors, Suppliers, and other persons and organizations proposed for those portions of the Work as to which the identity of Subcontractors, Suppliers, and other persons and organizations must be submitted as provided in the Supplementary Conditions. Owner also may consider the operating costs, maintenance requirements, performance data and guarantees of major items of materials and equipment proposed for incorporation in the Work when such data is required to be submitted prior to the Notice of Award.

14.4 Owner may conduct such investigations as Owner deems necessary to assist in the evaluation of any Bid and to establish the responsibility, qualifications and financial ability of Bidders, proposed Subcontractors, Suppliers and other persons and organizations to perform and furnish the Work in accordance with the Contract Documents to Owner's satisfaction with the prescribed time.

14.5 If the contract is to be awarded, it will be awarded to lowest Bidder whose evaluation by Owner indicates to Owner that the award will be in the best interests of the Project.

14.6 If the contract is to be awarded, Owner will give Successful Bidder a Notice of Award within thirty (30) days after the day of the Bid opening.

15.0 CONTRACT SECURITY

Paragraph 5.1 of the General Conditions and the Supplementary Conditions set forth Owner's requirements as to performance and payment Bonds. When the Successful Bidder delivers the executed Agreement to Owner, it must be accompanied by the required performance and payment Bonds.

16.0 SIGNING OF AGREEMENT

When Owner gives a Notice of Award to the Successful Bidder, it will be accompanied by the required number of unsigned counterparts of the Agreement with all other written Contract Documents attached. Within ten (10) days thereafter Contractor shall sign and deliver the required number of counterparts of the Agreement and attached documents to Owner with the required Bonds. Within ten (10) days thereafter Owner shall deliver one fully signed counterpart to Contractor. Each counterpart is to be accompanied by a complete set of the Drawings with appropriate identification.

17.0 PREBID CONFERENCE

A mandatory prebid meeting will be held at 10:00 AM on November 2, 2007 at the Keddy Mill site, located at 7 Depot Street in Windham, Maine. Representatives of Owner and Engineer will be present to discuss the Project. Bidders are encouraged to attend and participate in the conference. Engineer will transmit to all prospective Bidders of record such Addenda as Engineer considers necessary in response to questions arising at the conference. Oral statements may not be relied upon and will not be binding or legally effective.

18.0 RETAINAGE

Provisions concerning retainage and Contractors' rights to deposit securities in lieu of retainage are set forth in the Agreement.

END OF SECTION

SECTION 00300

BID FORM

PROJECT IDENTIFICATION: Former Keddy Mill Remediation

THIS BID IS SUBMITTED TO: Ransom Environmental Consultants, Inc.
400 Commercial Street, Suite 404
Portland, Maine 04101

1. The undersigned BIDDER proposes and agrees, if this Bid is accepted, to enter into an agreement with OWNER in the form included in the Contract Documents to perform and furnish all Work as specified or indicated in the Contract Documents for the Bid Price and within the Bid Time indicated in this Bid and in accordance with the other terms and conditions of the Contract Documents.

2. BIDDER accepts all of the terms and conditions of the Advertisement or Invitation to Bid and Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for thirty (30) days after the day of Bid opening. BIDDER will sign and deliver (the required number of counterparts of) the Agreement with the Bonds and other documents required by the Bidding Requirements within ten days after the date of OWNER's Notice of Award.

3. In submitting this Bid, BIDDER represents as more fully set forth in the Agreement, that:

   a. BIDDER has examined and carefully studied the Bidding Documents and the following Addenda receipt of all which is hereby acknowledged:

Date	Number
_____	_____
_____	_____
_____	_____

   b. BIDDER has visited the site and become familiar with and is satisfied as to the general, local and site conditions that may affect cost, progress, performance or furnishing of the Work.

   c. BIDDER is familiar with and is satisfied as to all federal, state and local Laws and Regulations that may affect cost, progress, performance and furnishing of the Work.

   d. BIDDER has carefully studied all reports of explorations and tests of surface conditions at or contiguous to the site and all drawings of physical conditions in or relating to existing surface structures at or contiguous to the site which have been identified in the Site Plan (Figure 1) and attached reports (Attachments A and B). BIDDER accepts the determination of the extent of the "technical data" contained in such reports and drawings

upon which BIDDER is entitled to rely as provided in the Bidding Documents. BIDDER acknowledges that such reports and drawings are not Contract Documents and may not be complete for BIDDER's purposes. BIDDER acknowledges that OWNER and ENGINEER do not assume responsibility for the accuracy or completeness of information and data shown or indicated in the Bidding Documents with respect to Underground Facilities at or contiguous to the site. BIDDER has obtained and carefully studied (or assumes responsibility for having done so) all such additional or supplementary examinations, investigations, explorations, tests, studies and data concerning conditions at or contiguous to the site or otherwise which may affect cost progress, performance or furnishing of the Work or which relate to any aspect of the means, methods, techniques, sequences and procedures of construction to be employed by BIDDER and safety precautions and programs incident thereto. BIDDER does not consider that any additional examinations, investigations, explorations, tests, studies or data are necessary for the determination of this Bid for performance and furnishing of the Work in accordance with the times, price and other terms and conditions of the Contract Documents.

e. BIDDER is aware of the general nature of Work to be performed by Owner and others at the site that relates to Work for which this Bid is submitted as indicated in the Contract Documents.

f. BIDDER has correlated the information known to BIDDER, information and observations obtained from visits to the site, reports and drawings identified in the Contract Documents and all additional examinations, investigations, explorations, tests, studies and data with the Contract Documents.

g. BIDDER has given ENGINEER written notice of all conflicts, errors, ambiguities or discrepancies that BIDDER has discovered in the Contract Documents and the written resolution thereof by ENGINEER is acceptable to BIDDER, and the Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performing and furnishing the Work for which this Bid is submitted.

h. This Bid is genuine and not made in the interest of or on behalf of any undisclosed person, firm or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation; BIDDER has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid; BIDDER has not solicited or induced any person, firm or corporation to refrain from bidding; and BIDDER has not sought by collusion to obtain for itself any advantage over any other Bidder or over OWNER.

i. BIDDER acknowledges that the Work will involve the Base Bid and that the price for the Base Bid shall be the basis of award.

4. BIDDER will complete the Base Work for the Proposed Base Bid Contract Price (Basis of Award) being the sum of Items 1 through 4 inclusive below.

BID SCHEDULE BASE BID				
ITEM NO.	**ESTIMATED QUANTITY**	**ITEM AND UNIT PRICE BID (in words)**	**UNIT PRICE**	**AMOUNT**
1	1 LS	Mobilization to and demobilization from the former Keddy Mill site. The Sum of $_____ _____ per lump sum	$_____	$_____
2	1 LS	Removal and disposal of all asbestos-containing materials from the former Keddy Mill site. The Sum of $_____ _____ Per lump sum	$_____	$_____
3	65 Tons	Removal, transport and disposal of PCB-contaminated dirt, sludge, and exposed sub-slab soil, and PCB-contaminated solid waste debris including oil-filled piping within the former Keddy Mill building. The Sum of $_____ _____ Per ton	$_____ Per Ton	$_____
4	1 LS	Removal and disposal of containerized oil and hazardous materials and universal wastes from the former Keddy Mill site. The Sum of $_____ _____ Per lump sum	$_____	$_____

BID SCHEDULE BASE BID				
ITEM NO.	**ESTIMATED QUANTITY**	**ITEM AND UNIT PRICE BID (in words)**	**UNIT PRICE**	**AMOUNT**
5	10 Containment Areas	Removal and jet steam cleaning of oil-stained equipment, walls and floors; proper disposal of oily materials; and containment, collection, and proper disposal of wash water. The Sum of $_____ _____ Per each containment area	$_____ Per each containment area	$_____
6	40 Tons	Excavation, transport and disposal of non-hazardous solid waste debris within the former Keddy Mill building. The Sum of $_____ _____ Per ton	$_____ Per ton	$_____
Total Base Bid (in words) $___				$_____

BIDDER acknowledges that quantities are not guaranteed and final payment will be based on actual quantities determined as provided in the Contract Documents. Payment for the work to be completed under the respective Bid Items is described below.

a. Item No. 1 – Mobilization/Demobilization

i. Method of Measurement: Per Lump Sum

ii. Payment: Payment for mobilization of the necessary labor and equipment to successfully complete the contract shall be made at the lump sum bid. The amount of this lump sum shall not exceed five percent of the total bid price of the contract, and no payment shall be made in excess of this amount.

a. Item No. 2 – Removal and Disposal of Asbestos-Containing Materials

i. Method of Measurement: Per Lump Sum

ii. Payment: Payment shall be made at the contract lump sum bid, which shall be full compensation for furnishing all labor, equipment, tools and materials required to complete the removal and proper disposal of all asbestos-containing materials at the former Keddy Mill site.

a. Item No. 3 – PCB-Contaminated Dirt, Sludge, and Exposed Sub-Slab Soil and PCB-Contaminated Solid Waste Removal and Disposal

i. Method of Measurement: Per Ton

ii. Payment: Payment shall be made at the contract unit price, per ton, which shall be full compensation for furnishing all labor, equipment, tools and materials required to complete the removal, transport and disposal of PCB-contaminated dirt, sludge, and exposed sub-slab soil and PCB-contaminated solid waste debris, including oil piping, inside the Keddy Mill building.

a. Item No. 4 – Containerized Oil, Hazardous Materials and Universal Waste Removal and Disposal

i. Method of Measurement: Per Lump Sum

ii. Payment: Payment shall be made at the contract lump sum bid which shall be full compensation for furnishing all labor, equipment, tools and materials required to complete the removal and disposal of all bulk containers of oil and hazardous materials and universal wastes at the former Keddy Mill site.

a. Item No. 5 – Oil-Stained Equipment and Walls Cleaning, Oil and Wash Water Collection, and Oil and Wash Water Disposal

i. Method of Measurement: Per Each Containment Area

ii. Payment: Payment shall be made at the contract unit price, per each containment area, which shall be full compensation for furnishing all labor, equipment, tools and materials required to complete the removal of oil from oil-stained equipment, and walls, jet steam cleaning of oily areas, collection of wash water, and transport and proper disposal of oil and wash water.

a. Item No. 6 – Non-hazardous Solid Waste Debris Removal

i. Method of Measurement: Per Ton

ii. Payment: Payment shall be made at the contract unit price, per ton, which shall be full compensation for furnishing all labor, equipment, tools and materials required to complete the removal, transport and disposal non-hazardous solid waste debris from inside the Keddy Mill building.

Incidental work items for which separate payment is not measured and is included in the above bid items, include, but are not limited to dust control; clean-up; signs; restoration of property; temporary facilities; site safety; and testing.

5. BIDDER agrees that the Work will be substantially complete by December 14, 2007 after the date when the Contract Time commences to run as provided in paragraph 2.3 of the General Conditions, and completed and ready for final payment by December 21, 2007.

6. Communications concerning this Bid shall be addressed to:

Name:_____

Address: _____

Telephone No. _____

7. The terms used in this Bid which are defined in the General Conditions or Instructions will have the meanings indicated in the General Conditions or Instructions.

SUBMITTED on _____ _____, 20_____

State Contractor License No. _____

IF BIDDER is:

An Individual

By _____ (SEAL)
(Individual's Name)

doing business as _____

Business address:_____
_____
_____

Phone No. _____

A Partnership

By _____ (SEAL)
(Firm Name)

General Partner: _____

Business address _____
_____
_____

Phone No. _____

A Corporation

By _____ (SEAL)
(Corporation Name)

State of Incorporation: _____

By _____ (SEAL)
(Name of Person Authorized to Sign)

Title: _____

(Corporate Seal)

Attest _____
(Secretary)

Business address: _____
_____
_____

Phone No. _____

A Joint Venture

By _____ (SEAL)
(Individual's Name)

Address: _____
_____
_____

By _____ (SEAL)
(Individual's Name)

Address: _____
_____
_____

Telephone Number and Address for receipt of official communications:

_____
_____
_____

Each joint venturer must sign. The manner of signing for each individual, partnership and corporation that is a party to the joint venture should be in the manner indicated above.

SECTION 00500

AGREEMENT

THIS AGREEMENT is dated as of the _____ day of_____ in the year 20____ by and between the Hudson Realty Capital, LLC (hereinafter called OWNER) and _____ (hereinafter called CONTRACTOR).

OWNER and CONTRACTOR, in consideration of the mutual covenants hereinafter set forth, agree as follows:

Article 1 - WORK

CONTRACTOR shall complete all Work as specified or indicated in the Contract Documents. The Work is as generally described in Section 01010, Summary of Work.

Article 2 - ENGINEER

The Engineer of Record for this project is Ransom Environmental Consultants, Inc., 400 Commercial Street, Suite 404, Portland, Maine 04101, who is hereinafter called ENGINEER and who is to act as OWNER's representative, assume all duties and responsibilities and have the rights and authority assigned to ENGINEER in the Contract Documents in connection with completion of the Work in accordance with the Contract Documents.

Article 3 - CONTRACT TIME

3.1 The Work will be substantially complete by December 14, 2007 after the date when the Contract Time commences to run as provided in paragraph 2.3 of the General Conditions, and completed and ready for final payment in accordance with paragraph 14.13 of the General Conditions by December 21, 2007.

Article 4 - CONTRACT PRICE

4.1 OWNER shall pay CONTRACTOR for completion of the Work in accordance with the Contract Documents an amount in current funds as follows at the Contract Price agreed upon in the Contractor's Bid Form attached to this Agreement.

As provided in paragraph 11.9 of the General Conditions estimated quantities are not guaranteed, and determinations of actual quantities and classification are to be made by ENGINEER as provided in paragraph 9.10 of the General Conditions. Unit prices have been computed as provided in paragraph 11.9.2 of the General Conditions.

Article 5 - PAYMENT PROCEDURES

CONTRACTOR shall submit Applications for Payment in accordance with Article 14 of the General Conditions. Applications for Payment will be processed by ENGINEER as provided in the General Conditions.

5.1 Progress Payments; Retainage. OWNER shall make monthly progress payments on account of the Contract Price on the basis of CONTRACTOR's Applications for Payment as recommended by ENGINEER, during construction as provided in paragraphs 5.1.1 and 5.1.2. All such payments will be measured by the schedule of values established in paragraph 2.9 of the General Conditions (and in the case of Unit Price Work based on the number of units completed) or, in the event there is no schedule of values, as provided in the General Requirements.

5.1.1 Prior to Substantial Completion, progress payments will be made in an amount equal to the percentage indicated below, but, in each case, less the aggregate of payments previously made and less such amounts as ENGINEER shall determine, or OWNER may withhold, in accordance with paragraph 14.7 of the General Conditions.

90% of Work completed (with the balance being retainage). If Work has been 50% completed as determined by ENGINEER, and if the character and progress of the Work have been satisfactory to OWNER and ENGINEER, OWNER on recommendation of ENGINEER, may determine that as long as the character and progress of the Work remain satisfactory to them, there will be no additional retainage on account of Work completed in which case the remaining progress payments prior to Substantial Completion will be in an amount equal to 100% of the Work completed.

100% (with the balance being retainage) of materials and equipment not incorporated in the Work (but delivered, suitably stored and accompanied by documentation satisfactory to OWNER as provided in paragraph 14.2 of the General Conditions).

5.1.2 Upon Substantial Completion, in an amount sufficient to increase total payments to CONTRACTOR to 98% of the Contract price, less such amounts as ENGINEER shall determine, or OWNER may withhold, in accordance with paragraph 14.7 of the General Conditions.

5.2 Final Payment. Upon final completion and acceptance of the Work in accordance with paragraph 14.13 of the General Conditions, OWNER shall pay the remainder of the Contract Price as recommended by ENGINEER as provided in said paragraph 14.13. Upon substantial completion of the work, retainage in the amount of 2% of the total contract will be retained for a period of 1 year from the date of substantial completion. In addition to the 2% retainage, the Owner shall retain an amount sufficient to cover the estimated cost of the work still to be completed.

Article 6 - INTEREST

All moneys not paid when due as provided in Article 14 of the General Conditions shall bear interest at the maximum available rate allowed by law at the place of the Project.

Article 7 - CONTRACTOR'S REPRESENTATIONS

In order to induce OWNER to enter into this Agreement CONTRACTOR makes the following representations:

7.1 CONTRACTOR has examined and carefully studied and Contract Documents (including the Addenda listed in paragraph 8) and the other related data identified in the Bidding Documents including "technical data".

7.2 CONTRACTOR has visited the site and become familiar with and is satisfied as to the general, local and site conditions that may affect cost, progress, performance or furnishing of the Work.

7.3 CONTRACTOR is familiar with and is satisfied as to all federal, state and local Laws and Regulations that may affect cost, progress, performance and furnishing of the Work.

7.4 CONTRACTOR has carefully studied all reports of explorations and tests of subsurface conditions at or contiguous to the site and all drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the site (except Underground Facilities) which have been identified in the Supplementary Conditions as provided in paragraph 4.2.1 of the General Conditions. CONTRACTOR accepts the determination set forth in paragraph SC-4.2 of the Supplementary Conditions of the extent of the "technical data" contained in such reports and drawings upon which CONTRACTOR is entitled to rely as provided in paragraph 4.2 of the General Conditions. CONTRACTOR acknowledges that such reports and drawings are not Contract Documents and may not be complete for CONTRACTOR's purposes. CONTRACTOR acknowledges that OWNER and ENGINEER do not assume responsibility for the accuracy or completeness of information and data shown or indicated in the Contract Documents with respect to Underground Facilities at or contiguous to the site. CONTRACTOR has obtained and carefully studied (or assumes responsibility for having done so) all such additional supplementary examinations, investigations, explorations, tests, studies and data concerning conditions (surface, subsurface and Underground Facilities) at or contiguous to the site or otherwise which may affect cost, progress, performance or furnishing of the Work or which relate to any aspect of the means, methods, techniques, sequences and procedures of construction to be employed by CONTRACTOR and safety precautions and programs incident thereto. CONTRACTOR does not consider that any additional examinations, investigations, explorations, tests, studies or data are necessary for the performance and furnishing of the Work at the Contract Price, within the Contract Times and in accordance with the other terms and conditions of the Contract Documents.

7.5 CONTRACTOR is aware of the general nature of work to be performed by OWNER and others at the site that relates to the Work as indicated in the Contract Documents.

7.6 CONTRACTOR has correlated the information known to CONTRACTOR, information and observations obtained from visits to the site, reports and drawings identified in the Contract Documents and all additional examinations, investigations, explorations, tests, studies and data with the Contract Documents.

7.7 CONTRACTOR has given ENGINEER written notice of all conflicts, errors, ambiguities or discrepancies that CONTRACTOR has discovered in the Contract Documents and the written resolution thereof by ENGINEER is acceptable to CONTRACTOR, and the Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

Article 8 - CONTRACT DOCUMENTS

The Contract Documents which comprise the entire agreement between OWNER and CONTRACTOR concerning the Work consist of the following:

8.1 Advertisement for Bids
8.2 Instructions to Bidders
8.3 Bid Form
8.4 Notice of Award
8.5 Agreement
8.6 Notice to Proceed
8.7 General Conditions
8.8 Change Order
8.9 Plans and Specifications prepared and issued by Ransom Environmental Consultants, Inc. dated October 23, 2007.
8.10 Addenda Nos. _____

There are no Contract Documents other than those listed above in this Article 8. The Contract Documents may only be amended, modified or supplemented as provided in paragraphs 3.5 and 3.6 of the General Conditions.

Article 9 - MISCELLANEOUS

9.1 Terms used in this Agreement which are defined in Article 1 of the General Conditions will have the meanings indicated in the General Conditions.

9.2 No assignment by a party hereto of any rights under or interests in the Contract Documents will be binding on another party hereto without the written consent of the party sought to be bound; and specifically but without limitation moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

9.3 OWNER and CONTRACTOR each binds itself, its partners, successors, assigns and legal representatives to the other party hereto, its partners, successors, assigns and legal representatives in respect of all covenants, agreements and obligations contained in the Contract Documents.

9.4 Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon OWNER and CONTRACTOR, who agree that the Contract Documents shall be reformed to replace such stricken provisions or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

IN WITNESS WHEREOF, OWNER and CONTRACTOR have signed this Agreement in triplicate. One counterpart each has been delivered to OWNER, CONTRACTOR and ENGINEER. All portions of the Contract Documents have been signed or identified by OWNER and CONTRACTOR or by ENGINEER on their behalf.

This Agreement will be effective on _____, 20_____.

OWNER _____	CONTRACTOR _____
_____	_____
By _____	By _____
[CORPORATE SEAL]	[CORPORATE SEAL]
Attest _____	Attest _____
Address for giving notices	Address for giving notices
_____	_____
_____	_____
(If OWNER is a public body, attach evidence of authority to sign and resolution or other documents authorizing execution of Agreement).	License No. _____ Agent for service of process:_____ (If CONTRACTOR is a corporation, attach evidence of authority to sign).

SECTION 00700
GENERAL CONDITIONS

Engineers Joint Documents Committee
Design and Construction Related Documents
Instructions and License Agreement

Instructions

Before you use any EJCDC document:

1. Read the License Agreement. You agree to it and are bound by its terms when you use the EJCDC document.

2. Make sure that you have the correct version for your word processing software.

How to Use:

1. While EJCDC has expended considerable effort to make the software translations exact, it can be that a few document controls (e.g., bold, underline) did not carry over.

2. Similarly, your software may change the font specification if the font is not available in your system. It will choose a font that is close in appearance. In this event, the pagination may not match the control set.

3. If you modify the document, you must follow the instructions in the License Agreement about notification.

4. Also note the instruction in the License Agreement about the EJCDC copyright.

License Agreement

You should carefully read the following terms and conditions before using this document. Commencement of use of this document indicates your acceptance of these terms and conditions. If you do not agree to them, you should promptly return the materials to the vendor, and your money will be refunded.

The Engineers Joint Contract Documents Committee ("EJCDC") provides **EJCDC Design and Construction Related Documents** and licenses their use worldwide. You assume sole responsibility for the selection of specific documents or portions thereof to achieve your intended results, and for the installation, use, and results obtained from **EJCDC Design and Construction Related Documents.**

You acknowledge that you understand that the text of the contract documents of **EJCDC Design and Construction Related Documents** has important legal consequences and that consultation with an attorney is recommended with respect to use or modification of the text. You further acknowledge that EJCDC documents are protected by the copyright laws of the United States.

License:
You have a limited nonexclusive license to:

1. Use **EJCDC Design and Construction Related Documents** on any number of machines owned, leased or rented by your company or organization.

2. Use **EJCDC Design and Construction Related Documents** in printed form for bona fide contract documents.

3. Copy **EJCDC Design and Construction Related Documents** into any machine readable or printed form for backup or modification purposes in support of your use of **EJCDC Design and Construction Related Documents.**

You agree that you will:

1. Reproduce and include EJCDC's copyright notice on any printed or machine-readable copy, modification, or portion merged into another document or program. All proprietary rights in **EJCDC Design and Construction Related Documents** are and shall remain the property of EJCDC.

2. Not represent that any of the contract documents you generate from **EJCDC Design and Construction Related Documents** are EJCDC documents unless (i) the document text is used without alteration or (ii) all additions and changes to, and deletions from, the text are clearly shown.

You may not use, copy, modify, or transfer EJCDC Design and Construction Related Documents, or any copy, modification or merged portion, in whole or in part, except as expressly provided for in this license. Reproduction of EJCDC Design and Construction Related Documents in printed or machine-readable format for resale or educational purposes is expressly prohibited.

If you transfer possession of any copy, modification or merged portion of EJCDC Design and Construction Related Documents to another party, your license is automatically terminated.

Term:
The license is effective until terminated. You may terminate it at any time by destroying **EJCDC Design and Construction Related Documents** altogether with all copies, modifications and merged portions in any form. It will also terminate upon conditions set forth elsewhere in this Agreement or if you fail to comply with any term or condition of this Agreement. You agree upon such termination to destroy **EJCDC Design and Construction Related Documents** along with all copies, modifications and merged portions in any form.

Limited Warranty:
EJCDC warrants the CDs and diskettes on which **EJCDC Design and Construction Related Documents** is furnished to be free from defects in materials and workmanship under normal use for a period of ninety (90) days from the date of delivery to you as evidenced by a copy of your receipt.

There is no other warranty of any kind, either expressed or implied, including, but not limited to the implied warranties of merchantability and fitness for a particular purpose. Some states do not allow the exclusion of implied warranties, so the above exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

EJCDC does not warrant that the functions contained in **EJCDC Design and Construction Related Documents** will meet your requirements or that the operation of **EJCDC Design and Construction Related Documents** will be uninterrupted or error free.

Limitations of Remedies:
EJCDC's entire liability and your exclusive remedy shall be:

1. the replacement of any document not meeting EJCDC's "Limited Warranty" which is returned to EJCDC's selling agent with a copy of your receipt, or

2. if EJCDC's selling agent is unable to deliver a replacement CD or diskette which is free of defects in materials and workmanship, you may terminate this Agreement by returning EJCDC Document and your money will be refunded.

In no event will EJCDC be liable to you for any damages, including any lost profits, lost savings or other incidental or consequential damages arising out of the use or inability to use **EJCDC Design and Construction Related Documents** even if EJCDC has been advised of the possibility of such damages, or for any claim by any other party.

Some states do not allow the limitation or exclusion of liability for incidental or consequential damages, so the above limitation or exclusion may not apply to you.

General:
You may not sublicense, assign, or transfer this license except as expressly provided in this Agreement. Any attempt otherwise to sublicense, assign, or transfer any of the rights, duties, or obligations hereunder is void.

This Agreement shall be governed by the laws of the State of Virginia. Should you have any questions concerning this Agreement, you may contact EJCDC by writing to:

Arthur Schwartz, Esq.
General Counsel
National Society of Professional Engineers
1420 King Street
Alexandria, VA 22314

Phone: (703) 684-2845
Fax: (703) 836-4875
e-mail: aschwartz@nspe.org

You acknowledge that you have read this agreement, understand it and agree to be bound by its terms and conditions. You further agree that it is the complete and exclusive statement of the agreement between us which supersedes any proposal or prior agreement, oral or written, and any other communications between us relating to the subject matter of this agreement.

This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the Controlling Law.

STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

Prepared by

ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE

and

Issued and Published Jointly By

ACEC
American Council of Engineering Companies

National Society of Professional Engineers
Professional Engineers in Private Practice

ASCE American Society of Civil Engineers

PROFESSIONAL ENGINEERS IN PRIVATE PRACTICE
a practice division of the
NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS

AMERICAN COUNCIL OF ENGINEERING COMPANIES

AMERICAN SOCIETY OF CIVIL ENGINEERS

This document has been approved and endorsed by

The Associated General Contractors of America

Knowledge for Creating and Sustaining the Built Environment

Construction Specifications Institute

These General Conditions have been prepared for use with the Suggested Forms of Agreement Between Owner and Contractor Nos. C-520 or C-525 (2002 Editions). Their provisions are interrelated and a change in one may necessitate a change in the other. Comments concerning their usage are contained in the EJCDC Construction Documents, General and Instructions (No. C-001) (2002 Edition). For guidance in the preparation of Supplementary Conditions, see Guide to the Preparation of Supplementary Conditions (No. C-800) (2002 Edition).

TABLE OF CONTENTS

Page

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GENERAL CONDITIONS

ARTICLE 1 - DEFINITIONS AND TERMINOLOGY

1.01 *Defined Terms*

A. Wherever used in the Bidding Requirements or Contract Documents and printed with initial capital letters, the terms listed below will have the meanings indicated which are applicable to both the singular and plural thereof. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.

1. *Addenda*--Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.

2. *Agreement*--The written instrument which is evidence of the agreement between Owner and Contractor covering the Work.

3. *Application for Payment*--The form acceptable to Engineer which is to be used by Contractor during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.

4. *Asbestos*--Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by the United States Occupational Safety and Health Administration.

5. *Bid*--The offer or proposal of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.

6. *Bidder*--The individual or entity who submits a Bid directly to Owner.

7. *Bidding Documents*--The Bidding Requirements and the proposed Contract Documents (including all Addenda).

8. *Bidding Requirements*--The Advertisement or Invitation to Bid, Instructions to Bidders, bid security of acceptable form, if any, and the Bid Form with any supplements.

9. *Change Order*--A document recommended by Engineer which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, issued on or after the Effective Date of the Agreement.

10. *Claim*--A demand or assertion by Owner or Contractor seeking an adjustment of Contract Price or Contract Times, or both, or other relief with respect to the terms of the Contract. A demand for money or services by a third party is not a Claim.

11. *Contract*--The entire and integrated written agreement between the Owner and Contractor concerning the Work. The Contract supersedes prior negotiations, representations, or agreements, whether written or oral.

12. *Contract Documents*-- Those items so designated in the Agreement. Only printed or hard copies of the items listed in the Agreement are Contract Documents. Approved Shop Drawings, other Contractor's submittals, and the reports and drawings of subsurface and physical conditions are not Contract Documents.

13. *Contract Price*--The moneys payable by Owner to Contractor for completion of the Work in accordance with the Contract Documents as stated in the Agreement (subject to the provisions of Paragraph 11.03 in the case of Unit Price Work).

14. *Contract Times*--The number of days or the dates stated in the Agreement to: (i) achieve Milestones, if any, (ii) achieve Substantial Completion; and (iii) complete the Work so that it is ready for final payment as evidenced by Engineer's written recommendation of final payment.

15. *Contractor*--The individual or entity with whom Owner has entered into the Agreement.

16. *Cost of the Work*--See Paragraph 11.01.A for definition.

17. *Drawings*--That part of the Contract Documents prepared or approved by Engineer which graphically shows the scope, extent, and character of the Work to be performed by Contractor. Shop Drawings and other Contractor submittals are not Drawings as so defined.

18. *Effective Date of the Agreement*--The date indicated in the Agreement on which it becomes effective, but if no such date is indicated, it means the date on which the Agreement is signed and delivered by the last of the two parties to sign and deliver.

19. *Engineer*--The individual or entity named as such in the Agreement.

20. *Field Order*--A written order issued by Engineer which requires minor changes in the Work but which does not involve a change in the Contract Price or the Contract Times.

21. *General Requirements*--Sections of Division 1 of the Specifications. The General Requirements pertain to all sections of the Specifications.

22. *Hazardous Environmental Condition*--The presence at the Site of Asbestos, PCBs, Petroleum, Hazardous Waste, or Radioactive Material in such quantities or circumstances that may present a substantial danger to persons or property exposed thereto in connection with the Work.

23. *Hazardous Waste*--The term Hazardous Waste shall have the meaning provided in Section 1004 of the Solid Waste Disposal Act (42 USC Section 6903) as amended from time to time.

24. *Laws and Regulations; Laws or Regulations*--Any and all applicable laws, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.

25. *Liens*--Charges, security interests, or encumbrances upon Project funds, real property, or personal property.

26. *Milestone*--A principal event specified in the Contract Documents relating to an intermediate completion date or time prior to Substantial Completion of all the Work.

27. *Notice of Award*--The written notice by Owner to the Successful Bidder stating that upon timely compliance by the Successful Bidder with the conditions precedent listed therein, Owner will sign and deliver the Agreement.

28. *Notice to Proceed*--A written notice given by Owner to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work under the Contract Documents.

29. *Owner*--The individual or entity with whom Contractor has entered into the Agreement and for whom the Work is to be performed.

30. *PCBs*--Polychlorinated biphenyls.

31. *Petroleum*--Petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute), such as oil, petroleum, fuel oil, oil sludge, oil refuse, gasoline, kerosene, and oil mixed with other non-Hazardous Waste and crude oils.

32. *Progress Schedule*--A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising the Contractor's plan to accomplish the Work within the Contract Times.

33. *Project*--The total construction of which the Work to be performed under the Contract Documents may be the whole, or a part.

34. *Project Manual*--The bound documentary information prepared for bidding and constructing the Work. A listing of the contents of the Project Manual, which may be bound in one or more volumes, is contained in the table(s) of contents.

35. *Radioactive Material*--Source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954 (42 USC Section 2011 et seq.) as amended from time to time.

36. *Related Entity* -- An officer, director, partner, employee, agent, consultant, or subcontractor.

37. *Resident Project Representative*--The authorized representative of Engineer who may be assigned to the Site or any part thereof.

38. *Samples*--Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portion of the Work will be judged.

39. *Schedule of Submittals*--A schedule, prepared and maintained by Contractor, of required submittals and the time requirements to support scheduled performance of related construction activities.

40. *Schedule of Values*--A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.

41. *Shop Drawings*--All drawings, diagrams, illustrations, schedules, and other data or information which are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work.

42. *Site*--Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements for access thereto, and such other lands furnished by Owner which are designated for the use of Contractor.

43. *Specifications*--That part of the Contract Documents consisting of written requirements for materials, equipment, systems, standards and workmanship as applied to the Work, and certain

administrative requirements and procedural matters applicable thereto.

44. *Subcontractor*--An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work at the Site.

45. *Substantial Completion*--The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms "substantially complete" and "substantially completed" as applied to all or part of the Work refer to Substantial Completion thereof.

46. *Successful Bidder*--The Bidder submitting a responsive Bid to whom Owner makes an award.

47. *Supplementary Conditions*--That part of the Contract Documents which amends or supplements these General Conditions.

48. *Supplier*--A manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or any Subcontractor.

49. *Underground Facilities*--All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.

50. *Unit Price Work*--Work to be paid for on the basis of unit prices.

51. *Work*--The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction, and furnishing, installing, and incorporating all materials and equipment into such construction, all as required by the Contract Documents.

52. *Work Change Directive*--A written statement to Contractor issued on or after the Effective Date of the Agreement and signed by Owner and recommended by Engineer ordering an addition, deletion, or revision in the Work, or responding to differing or unforeseen subsurface or physical conditions under which the Work is to be performed or to emergencies. A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the change ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the Contract Price or Contract Times.

1.02 *Terminology*

A. The following words or terms are not defined but, when used in the Bidding Requirements or Contract Documents, have the following meaning.

B. *Intent of Certain Terms or Adjectives*

1. The Contract Documents include the terms "as allowed," "as approved," "as ordered", "as directed" or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the adjectives "reasonable," "suitable," "acceptable," "proper," "satisfactory," or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action or determination will be solely to evaluate, in general, the Work for compliance with the requirements of and information in the Contract Documents and conformance with the design concept of the completed Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of Paragraph 9.09 or any other provision of the Contract Documents.

C. *Day*

1. The word "day" means a calendar day of 24 hours measured from midnight to the next midnight.

D. *Defective*

1. The word "defective," when modifying the word "Work," refers to Work that is unsatisfactory, faulty, or deficient in that it:

a. does not conform to the Contract Documents, or

b. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents, or

c. has been damaged prior to Engineer's recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 14.04 or 14.05).

E. *Furnish, Install, Perform, Provide*

1. The word "furnish," when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.

2. The word "install," when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.

3. The words "perform" or "provide," when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.

4. When "furnish," "install," "perform," or "provide" is not used in connection with services, materials, or equipment in a context clearly requiring an obligation of Contractor, "provide" is implied.

F. Unless stated otherwise in the Contract Documents, words or phrases which have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

ARTICLE 2 - PRELIMINARY MATTERS

2.01 *Delivery of Bonds and Evidence of Insurance*

A. When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner such bonds as Contractor may be required to furnish.

B. *Evidence of Insurance:* Before any Work at the Site is started, Contractor and Owner shall each deliver to the other, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance which either of them or any additional insured may reasonably request) which Contractor and Owner respectively are required to purchase and maintain in accordance with Article 5.

2.02 *Copies of Documents*

A. Owner shall furnish to Contractor up to ten printed or hard copies of the Drawings and Project Manual. Additional copies will be furnished upon request at the cost of reproduction.

2.03 *Commencement of Contract Times; Notice to Proceed*

A. The Contract Times will commence to run on the thirtieth day after the Effective Date of the Agreement or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Agreement. In no event will the Contract Times commence to run later than the sixtieth day after the day of Bid opening or the thirtieth day after the Effective Date of the Agreement, whichever date is earlier.

2.04 *Starting the Work*

A. Contractor shall start to perform the Work on the date when the Contract Times commence to run. No Work shall be done at the Site prior to the date on which the Contract Times commence to run.

2.05 *Before Starting Construction*

A. *Preliminary Schedules:* Within 10 days after the Effective Date of the Agreement (unless otherwise specified in the General Requirements), Contractor shall submit to Engineer for timely review:

1. a preliminary Progress Schedule; indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract Documents;

2. a preliminary Schedule of Submittals; and

3. a preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

2.06 *Preconstruction Conference*

A. Before any Work at the Site is started, a conference attended by Owner, Contractor, Engineer, and others as appropriate will be held to establish a working understanding among the parties as to the Work and to discuss the schedules referred to in Paragraph 2.05.A, procedures for handling Shop Drawings and other submittals, processing Applications for Payment, and maintaining required records.

2.07 *Initial Acceptance of Schedules*

A. At least 10 days before submission of the first Application for Payment a conference attended by Contractor, Engineer, and others as appropriate will be held to review for acceptability to Engineer as provided below the schedules submitted in accordance with Paragraph 2.05.A. Contractor shall have an additional 10 days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall be made to Contractor until acceptable schedules are submitted to Engineer.

1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work nor interfere with or relieve Contractor from Contractor's full responsibility therefor.

2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.

3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to component parts of the Work.

ARTICLE 3 - CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

3.01 *Intent*

A. The Contract Documents are complementary; what is required by one is as binding as if required by all.

B. It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents. Any labor, documentation, services, materials, or equipment that may reasonably be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the intended result will be provided whether or not specifically called for at no additional cost to Owner.

C. Clarifications and interpretations of the Contract Documents shall be issued by Engineer as provided in Article 9.

3.02 *Reference Standards*

A. Standards, Specifications, Codes, Laws, and Regulations

1. Reference to standards, specifications, manuals, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, shall mean the standard, specification, manual, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Agreement if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.

2. No provision of any such standard, specification, manual or code, or any instruction of a Supplier shall be effective to change the duties or responsibilities of Owner, Contractor, or Engineer, or any of their subcontractors, consultants, agents, or employees from those set forth in the Contract Documents. No such provision or instruction shall be effective to assign to Owner, or Engineer, or any of, their Related Entities, any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the Contract Documents.

3.03 *Reporting and Resolving Discrepancies*

A. Reporting Discrepancies

1. *Contractor's Review of Contract Documents Before Starting Work*: Before undertaking each part of the Work, Contractor shall carefully study and compare the Contract Documents and check and verify pertinent figures therein and all applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy which Contractor may discover and shall obtain a written interpretation or clarification from Engineer before proceeding with any Work affected thereby.

2. *Contractor's Review of Contract Documents During Performance of Work*: If, during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents or between the Contract Documents and any provision of any Law or Regulation applicable to the performance of the Work or of any standard, specification, manual or code, or of any instruction of any Supplier, Contractor shall promptly report it to Engineer in writing. Contractor shall not proceed with the Work affected thereby (except in an emergency as required by Paragraph 6.16.A) until an amendment or supplement to the Contract Documents has been issued by one of the methods indicated in Paragraph 3.04.

3. Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor knew or reasonably should have known thereof.

B. Resolving Discrepancies

1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the Contract Documents shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between the provisions of the Contract Documents and:

a. the provisions of any standard, specification, manual, code, or instruction (whether or not specifically incorporated by reference in the Contract Documents); or

b. the provisions of any Laws or Regulations applicable to the performance of the Work

(unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

3.04 *Amending and Supplementing Contract Documents*

A. The Contract Documents may be amended to provide for additions, deletions, and revisions in the Work or to modify the terms and conditions thereof by either a Change Order or a Work Change Directive.

B. The requirements of the Contract Documents may be supplemented, and minor variations and deviations in the Work may be authorized, by one or more of the following ways:

1. A Field Order;

2. Engineer's approval of a Shop Drawing or Sample; (Subject to the provisions of Paragraph 6.17.D.3); or

3. Engineer's written interpretation or clarification.

3.05 *Reuse of Documents*

A. Contractor and any Subcontractor or Supplier or other individual or entity performing or furnishing all of the Work under a direct or indirect contract with Contractor, shall not:

1. have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or Engineer's consultants, including electronic media editions; or

2. reuse any of such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaption by Engineer.

B. The prohibition of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein shall preclude Contractor from retaining copies of the Contract Documents for record purposes.

3.06 *Electronic Data*

A. Copies of data furnished by Owner or Engineer to Contractor or Contractor to Owner or Engineer that may be relied upon are limited to the printed copies (also known as hard copies). Files in electronic media format of text, data, graphics, or other types are furnished only for the convenience of the receiving party. Any conclusion or information obtained or derived from such electronic files will be at the user's sole risk. If there is a discrepancy between the electronic files and the hard copies, the hard copies govern.

B. Because data stored in electronic media format can deteriorate or be modified inadvertently or otherwise without authorization of the data's creator, the party receiving electronic files agrees that it will perform acceptance tests or procedures within 60 days, after which the receiving party shall be deemed to have accepted the data thus transferred. Any errors detected within the 60-day acceptance period will be corrected by the transferring party..

C. When transferring documents in electronic media format, the transferring party makes no representations as to long term compatibility, usability, or readability of documents resulting from the use of software application packages, operating systems, or computer hardware differing from those used by the data's creator.

ARTICLE 4 - AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS; REFERENCE POINTS

4.01 *Availability of Lands*

A. Owner shall furnish the Site. Owner shall notify Contractor of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work. Owner will obtain in a timely manner and pay for easements for permanent structures or permanent changes in existing facilities. If Contractor and Owner are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, as a result of any delay in Owner's furnishing the Site or a part thereof, Contractor may make a Claim therefor as provided in Paragraph 10.05.

B. Upon reasonable written request, Owner shall furnish Contractor with a current statement of record legal title and legal description of the lands upon which the Work is to be performed and Owner's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.

C. Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

4.02 *Subsurface and Physical Conditions*

A. *Reports and Drawings:* The Supplementary Conditions identify:

1. those reports of explorations and tests of subsurface conditions at or contiguous to the Site that Engineer has used in preparing the Contract Documents; and

2. those drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site (except Underground Facilities) that Engineer has used in preparing the Contract Documents.

B. *Limited Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the general accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. Except for such reliance on such "technical data," Contractor may not rely upon or make any claim against Owner or Engineer, or any of their Related Entities with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto; or

2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or

3. any Contractor interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions, or information.

4.03 *Differing Subsurface or Physical Conditions*

A. *Notice:* If Contractor believes that any subsurface or physical condition at or contiguous to the Site that is uncovered or revealed either:

1. is of such a nature as to establish that any "technical data" on which Contractor is entitled to rely as provided in Paragraph 4.02 is materially inaccurate; or

2. is of such a nature as to require a change in the Contract Documents; or

3. differs materially from that shown or indicated in the Contract Documents; or

4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 6.16.A), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except as aforesaid) until receipt of written order to do so.

B. *Engineer's Review*: After receipt of written notice as required by Paragraph 4.03.A, Engineer will promptly review the pertinent condition, determine the necessity of Owner's obtaining additional exploration or tests with respect thereto, and advise Owner in writing (with a copy to Contractor) of Engineer's findings and conclusions.

C. Possible Price and Times Adjustments

1. The Contract Price or the Contract Times, or both, will be equitably adjusted to the extent that the existence of such differing subsurface or physical condition causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:

a. such condition must meet any one or more of the categories described in Paragraph 4.03.A; and

b. with respect to Work that is paid for on a Unit Price Basis, any adjustment in Contract Price will be subject to the provisions of Paragraphs 9.07 and 11.03.

2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times if:

a. Contractor knew of the existence of such conditions at the time Contractor made a final commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract; or

b. the existence of such condition could reasonably have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such final commitment; or

c. Contractor failed to give the written notice as required by Paragraph 4.03.A.

3. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, a Claim may be made therefor as provided in Paragraph 10.05. However, Owner and Engineer, and any of their Related Entities shall not be liable to Contractor for any claims, costs, losses, or damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Contractor on or in connection with any other project or anticipated project.

4.04 *Underground Facilities*

A. *Shown or Indicated:* The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the Site is based on information and data furnished to Owner or Engineer by the owners of such Underground Facilities, including Owner, or by others. Unless it is otherwise expressly provided in the Supplementary Conditions:

1. Owner and Engineer shall not be responsible for the accuracy or completeness of any such information or data; and

2. the cost of all of the following will be included in the Contract Price, and Contractor shall have full responsibility for:

a. reviewing and checking all such information and data,

b. locating all Underground Facilities shown or indicated in the Contract Documents,

c. coordination of the Work with the owners of such Underground Facilities, including Owner, during construction, and

d. the safety and protection of all such Underground Facilities and repairing any damage thereto resulting from the Work.

B. *Not Shown or Indicated*

1. If an Underground Facility is uncovered or revealed at or contiguous to the Site which was not shown or indicated, or not shown or indicated with reasonable accuracy in the Contract Documents, Contractor shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by Paragraph 6.16.A), identify the owner of such Underground Facility and give written notice to that owner and to Owner and Engineer. Engineer will promptly review the Underground Facility and determine the extent, if any, to which a change is required in the Contract Documents to reflect and document the consequences of the existence or location of the Underground Facility. During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.

2. If Engineer concludes that a change in the Contract Documents is required, a Work Change Directive or a Change Order will be issued to reflect and document such consequences. An equitable adjustment shall be made in the Contract Price or Contract Times, or both, to the extent that they are attributable to the existence or location of any Underground Facility that was not shown or indicated or not shown or indicated with reasonable accuracy in the Contract Documents and that Contractor did not know of and could not reasonably have been expected to be aware of or to have anticipated. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment in Contract Price or Contract Times, Owner or Contractor may make a Claim therefor as provided in Paragraph 10.05.

4.05 *Reference Points*

A. Owner shall provide engineering surveys to establish reference points for construction which in Engineer's judgment are necessary to enable Contractor to proceed with the Work. Contractor shall be responsible for laying out the Work, shall protect and preserve the established reference points and property monuments, and shall make no changes or relocations without the prior written approval of Owner. Contractor shall report to Engineer whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

4.06 *Hazardous Environmental Condition at Site*

A. *Reports and Drawings:* Reference is made to the Supplementary Conditions for the identification of those reports and drawings relating to a Hazardous Environmental Condition identified at the Site, if any, that have been utilized by the Engineer in the preparation of the Contract Documents.

B. *Limited Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the general accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. Except for such reliance on such "technical data," Contractor may not rely upon or make any claim against Owner or Engineer, or any of their Related Entities with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by Contractor and safety precautions and programs incident thereto; or

2. other data, interpretations, opinions and information contained in such reports or shown or indicated in such drawings; or

3. any Contractor interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions or information.

C. Contractor shall not be responsible for any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work. Contractor shall be responsible for a Hazardous Environmental Condition created with any materials brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible.

D. If Contractor encounters a Hazardous Environmental Condition or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, Contractor shall immediately: (i) secure or otherwise isolate such condition; (ii) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 6.16.A); and (iii) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any.

E. Contractor shall not be required to resume Work in connection with such condition or in any affected area until after Owner has obtained any required permits related thereto and delivered to Contractor written notice: (i) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work; or (ii) specifying any special conditions under which such Work may be resumed safely. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, or both, as a result of such Work stoppage or such special conditions under which Work is agreed to be resumed by Contractor, either party may make a Claim therefor as provided in Paragraph 10.05.

F. If after receipt of such written notice Contractor does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special conditions, then Owner may order the portion of the Work that is in the area affected by such condition to be deleted from the Work. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of an adjustment in Contract Price or Contract Times as a result of deleting such portion of the Work, then either party may make a Claim therefor as provided in Paragraph 10.05. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 7.

G. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, and Engineer, and the officers, directors, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition: (i) was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be included within the scope of the Work, and (ii) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 4.06. G shall obligate Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

H. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 4.06.H shall obligate Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

I. The provisions of Paragraphs 4.02, 4.03, and 4.04 do not apply to a Hazardous Environmental Condition uncovered or revealed at the Site.

ARTICLE 5 - BONDS AND INSURANCE

5.01 *Performance, Payment, and Other Bonds*

A. Contractor shall furnish performance and payment bonds, each in an amount at least equal to the Contract Price as security for the faithful performance and payment of all of Contractor's obligations under the Contract Documents. These bonds shall remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified

in Paragraph 13.07, whichever is later, except as provided otherwise by Laws or Regulations or by the Contract Documents. Contractor shall also furnish such other bonds as are required by the Contract Documents.

B. All bonds shall be in the form prescribed by the Contract Documents except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. All bonds signed by an agent must be accompanied by a certified copy of the agent's authority to act.

C. If the surety on any bond furnished by Contractor is declared bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of the Project is located or it ceases to meet the requirements of Paragraph 5.01.B, Contractor shall promptly notify Owner and Engineer and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which shall comply with the requirements of Paragraphs 5.01.B and 5.02.

5.02 *Licensed Sureties and Insurers*

A. All bonds and insurance required by the Contract Documents to be purchased and maintained by Owner or Contractor shall be obtained from surety or insurance companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue bonds or insurance policies for the limits and coverages so required. Such surety and insurance companies shall also meet such additional requirements and qualifications as may be provided in the Supplementary Conditions.

5.03 *Certificates of Insurance*

A. Contractor shall deliver to Owner, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by Owner or any other additional insured) which Contractor is required to purchase and maintain.

B. Owner shall deliver to Contractor, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by Contractor or any other additional insured) which Owner is required to purchase and maintain.

5.04 *Contractor's Liability Insurance*

A. Contractor shall purchase and maintain such liability and other insurance as is appropriate for the Work being performed and as will provide protection from claims set forth below which may arise out of or result from Contractor's performance of the Work and Contractor's other obligations under the Contract Documents, whether it is to be performed by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable:

1. claims under workers' compensation, disability benefits, and other similar employee benefit acts;

2. claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees;

3. claims for damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees;

4. claims for damages insured by reasonably available personal injury liability coverage which are sustained:

   a. by any person as a result of an offense directly or indirectly related to the employment of such person by Contractor, or

   b. by any other person for any other reason;

5. claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom; and

6. claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance or use of any motor vehicle.

B. The policies of insurance required by this Paragraph 5.04 shall:

1. with respect to insurance required by Paragraphs 5.04.A.3 through 5.04.A.6 inclusive, include as additional insured (subject to any customary exclusion regarding professional liability) Owner and Engineer, and any other individuals or entities identified in the Supplementary Conditions, all of whom shall be listed as additional insureds, and include coverage for the respective officers, directors, partners, employees, agents, consultants and subcontractors of each and any of all such additional insureds, and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby;

2. include at least the specific coverages and be written for not less than the limits of liability provided in the Supplementary Conditions or required by Laws or Regulations, whichever is greater;

3. include completed operations insurance;

4. include contractual liability insurance covering Contractor's indemnity obligations under Paragraphs 6.11 and 6.20;

5. contain a provision or endorsement that the coverage afforded will not be canceled, materially changed or renewal refused until at least 30 days prior written notice has been given to Owner and Contractor and to each other additional insured identified in the Supplementary Conditions to whom a certificate of insurance has been issued (and the certificates of insurance furnished by the Contractor pursuant to Paragraph 5.03 will so provide);

6. remain in effect at least until final payment and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work in accordance with Paragraph 13.07; and

7. with respect to completed operations insurance, and any insurance coverage written on a claims-made basis, remain in effect for at least two years after final payment.

a. Contractor shall furnish Owner and each other additional insured identified in the Supplementary Conditions, to whom a certificate of insurance has been issued, evidence satisfactory to Owner and any such additional insured of continuation of such insurance at final payment and one year thereafter.

5.05 *Owner's Liability Insurance*

A. In addition to the insurance required to be provided by Contractor under Paragraph 5.04, Owner, at Owner's option, may purchase and maintain at Owner's expense Owner's own liability insurance as will protect Owner against claims which may arise from operations under the Contract Documents.

5.06 *Property Insurance*

A. Unless otherwise provided in the Supplementary Conditions, Owner shall purchase and maintain property insurance upon the Work at the Site in the amount of the full replacement cost thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). This insurance shall:

1. include the interests of Owner, Contractor, Subcontractors, and Engineer, and any other individuals or entities identified in the Supplementary Conditions, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them, each of whom is deemed to have an insurable interest and shall be listed as an insured or additional insured;

2. be written on a Builder's Risk "all-risk" or open peril or special causes of loss policy form that shall at least include insurance for physical loss or damage to the Work, temporary buildings, false work, and materials and equipment in transit, and shall insure against at least the following perils or causes of loss: fire, lightning, extended coverage, theft, vandalism and malicious mischief, earthquake, collapse, debris removal, demolition occasioned by enforcement of Laws and Regulations, water damage, (other than caused by flood) and such other perils or causes of loss as may be specifically required by the Supplementary Conditions;

3. include expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects);

4. cover materials and equipment stored at the Site or at another location that was agreed to in writing by Owner prior to being incorporated in the Work, provided that such materials and equipment have been included in an Application for Payment recommended by Engineer;

5. allow for partial utilization of the Work by Owner;

6. include testing and startup; and

7. be maintained in effect until final payment is made unless otherwise agreed to in writing by Owner, Contractor, and Engineer with 30 days written notice to each other additional insured to whom a certificate of insurance has been issued.

B. Owner shall purchase and maintain such boiler and machinery insurance or additional property insurance as may be required by the Supplementary Conditions or Laws and Regulations which will include the interests of Owner, Contractor, Subcontractors, and Engineer, and any other individuals or entities identified in the Supplementary Conditions, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them, each of whom is deemed to have an insurable interest and shall be listed as an insured or additional insured.

C. All the policies of insurance (and the certificates or other evidence thereof) required to be purchased and maintained in accordance with Paragraph 5.06 will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 30 days prior written notice has been given to Owner and Contractor and to each other additional insured to whom a certificate of insurance has been issued and will contain waiver provisions in accordance with Paragraph 5.07.

D. Owner shall not be responsible for purchasing and maintaining any property insurance specified in this Paragraph 5.06 to protect the interests of Contractor, Subcontractors, or others in the Work to the extent of any